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**MULTIMODAL
TRANSPORT
AND
OPPORTUNITIES
FOR
DIVERSION
OF
CARGO**

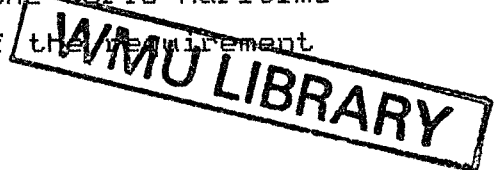
WORLD MARITIME UNIVERSITY.
MALMO, SWEDEN.

MULTIMODAL TRANSPORT AND OPPORTUNITIES
FOR DIVERSION OF CARGO.

BY

MOHD SIDIK BIN SHAIK OSMAN.
MALAYSIA.

A paper submitted to the Faculty of the World Maritime
University in partial satisfaction of the requirement
for the award of a

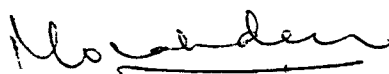


MASTER OF SCIENCE DEGREE

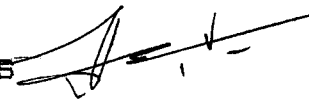
IN

(GENERAL MARITIME ADMINISTRATION)

The contents of this paper reflects my personal views
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SUPERVISED AND ASSESSED BY: DR. HARALAMBIDES 
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ABSTRACT

For the last 15 years in Malaysia containerisation and its attendant changes and repercussions have been the focus for decision making in all aspects of port planning. Presently containerisation is well rooted in Malaysia's sea trade although considerable room for growth still remains. Along with containerisation another area that has attracted a lot of attention and concern is the development of load centering in the Port of Singapore. What it means is that a large numbers of containers is not handled directly but are first transhipped in Singapore and then feedered to Malaysian ports.

For many reasons including historical Malaysians do not feel "too happy" that their expensive container ports are relegated to feeder status. As a result there has been over the years many discussions and seminars held to discuss this issue and to find ways to promote direct service to Malaysian ports. This paper is just another attempt to contribute to these discussions. It however looks at the problem from a fresh "angle" by bringing in the concept of multimodal transport. As the title of the paper suggests - multimodal transport may bring in new opportunities to promote direct service.

In the light of the above background, this paper in the first part looks at the economy of the country, the development of containerisation in the region and to what extent there has been load centering and its effect to the economy.

The second part of the paper looks at the present routing

of containers. It is found that the present routeing of containers transhipped at the port of Singapore as not efficient and a multimodal routeing as a better alternative. There are also opportunities by this routeing to develop port Klang as a load centre and attract container traffic as far north as Thailand

The final part of the paper is a general discussion of multimodal transport and what it means. It also discusses briefly some commercial aspects of multimodal transport relating to documentary credit and bills of lading. It is felt that this is an important aspect and would determine the practical aspects of introducing multimodal transport in the country.

ACKNOWLEDGEMENT

I would like to acknowledge the guidance and assistance of DR. Hara,lambides and Mr.Carlos Moreno in preparing this thesis.I am also grateful for support given by my colleagues in the Ministry of Transport,Malaysia and staff of Kelang Container Terminal.

Finally my gratitude goes to my family for all their support and encouragement during my studies here.

CONTENTS

ABSTRACT.....	(i)
ACKNOWLEDGEMENT.....	(iii)
TABLE OF CONTENT.....	(iv)
CHAPTER 1. PORTS AND ECONOMY.	
A.COUNTRY DESCRIPTION.....	1
B.ECONOMIC SETTING.....	2
C.PORT ADMINISTRATION.....	7
D.NATIONAL PORT POLICIES.....	8
CHAPTER 2. CONTAINERISATION IN MALAYSIA.	
A.DEVELOPMENT OF CONTAINERISATION IN THE REGION.....	11
B.EXISTING SHIPPING SERVICES IN THE REGION.....	12
C.MAIN CONTAINER PORTS.....	15
D.CONTAINERS HANDLED.....	16
E.CONTAINER GROWTH RATES.....	19
F.PORT PERFORMANCE.....	20

CHAPTER 3. SINGAPORE TRANSHIPMENT CENTRE AND THE COST TO THE MALAYSIAN ECONOMY.

A. INTRODUCTION.....	24
B.COST TO THE ECONOMY.....	25
C.BENEFITS OF DIVERSION OF CARGO.....	25

CHAPTER 4.CONTAINER ROUTEING.

A.DEVELOPMENT OF CONTAINER ROUTEING.....	30
PATTERN IN MALAYSIA.	
B.ROUTEING OF PENANG BOUND CONTAINERS.....	31
C.MULTIMODAL ROUTEING.....	32

CHAPTER 5. MULTIMODAL TRANSPORT.

A.WHAT IS MULTIMODAL TRANSPORT.....	36
B.MULTIMODAL TRANSPORT AND CHANGES IN.....	37
SHIPPING INDUSTRY	
C.MULTIMODAL TRANSPORT AND ITS IMPACT ON PORTS.....	40

CHAPTER 6. COMMERCIAL REQUIREMENT OF MULTIMODAL TRANSPORT.

A.INTRODUCTION.....	42
B.DEVELOPMENTS ON NEW INCOTERMS.....	42
C.DOCUMENTARY CREDITS.....	44
D.SIMPLIFICATION OF CUSTOM PROCEDURES.....	44
E.BILLS OF LADING AND LIABILITY.....	45
IN MULTIMODAL TRANSPORT.	
F.MULTIMODAL COMMERCIAL PRACTICE.....	48

CHAPTER 7.SUMMARY AND CONCLUSION.....51

CHAPTER 1 - PORTS AND ECONOMY.

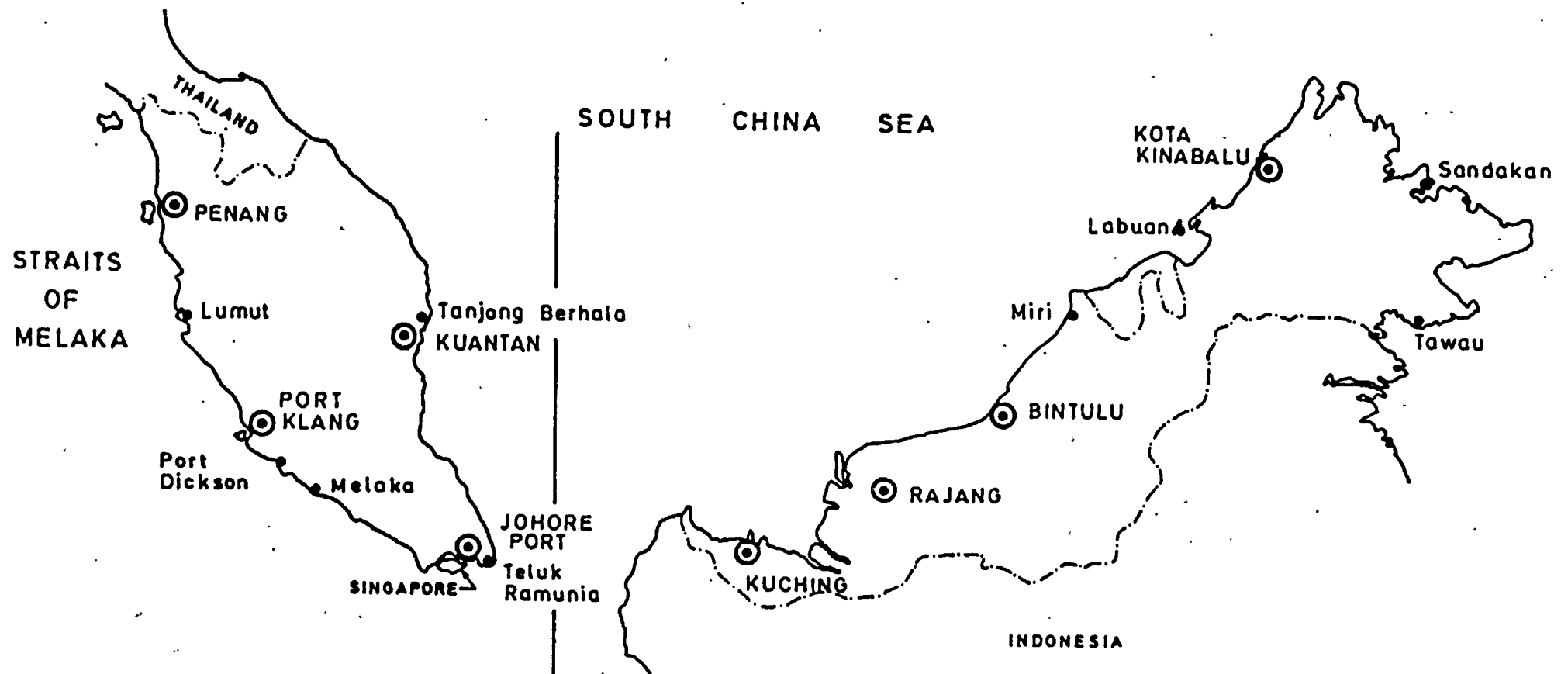
A. COUNTRY DESCRIPTION.

1.1 The Federation of Malaysia comprises 13 states in two separate geographical areas of South East Asia. Eleven states on the Malay Peninsula comprise West Malaysia (51,000 sq.miles). Two states, Sabah and Sarawak comprise East Malaysia (77,000 sq.miles) on the north eastern coast of island of Borneo, some 400 miles to the east of West Malaysia across the South China Sea. Malaysia has land borders with Thailand to the north on the peninsula and with Indonesia to the south on the island of Borneo. It is separated by a narrow sea channel from the island of Singapore at the southern tip of the peninsula. The map of the country showing also the locations of main ports is in figure 1.1.

1.2 Only 20 % of Malaysia is cultivated ; the remainder is covered by tropical forest. West Malaysia is generally mountainous ; with over two thirds of the area above 300 meters. A central mountain chain divides into a west and east coast region. Protected by the mountains against severe monsoon and bordering on one of the world's most busy shipping routes (the Straits of Malacca), the west coast has developed faster than the rest of the country. Two thirds of the population lives there and work either in the main urban areas where industrial zones have developed or in the important agricultural and mining areas, which produce, among other things, rubber , palm oil and tin for export. East Malaysia is also mountainous with a long coast line and numerous rivers. Economic activity in East Malaysia and the east coast of Peninsula Malaysia is centered on the production of oil , gas , timber, cocoa and

PORTS OF MALAYSIA

FIG 1.1



LEGEND :-

- ⊙ Major Ports
- Principal Minor Ports

palm oils, as well as fisheries.

1.3 Malaysia's population in 1985 totalled some 15.8 million ,reflecting an average 2.6 % annual increase from 1981.This rate of growth is expected to continue until 1990.About 82%of the population lives in Peninsula Malaysia while Sabah and Sarawak accounts for only 8% and 12% respectively.Population density is about 120 persons per sq. kilometer in West Malaysia compared to 12.5 for Sarawak and 17.4 in Sabah.

B. ECONOMIC SETTING.

1.4 During the colonial era ,Malaysia was developed into a major producer of rubber and tin and was to import its requirement of manufactured products.As a result by the early twentieth century the country was wholly dependent on two commodities for its export earnings.This dependence means that any change in the demand for these two commodities would have an amplified effect on the economy of the country.

1.5 Realizing this since independence, the country diversified its economy and export activities to include palm oil,timber,petroleum and manufactured products.This period witnessed rapid economic growth and structural transformation of the economy.The gross domestic product grew by 6.5 % per annum in the 1960's.Between 1971 - 1982 the GDP grew by about 7.7 %.By 1985 Malaysia's per capita income of US \$2113 ranked significantly in Asia.

1.6 The changing structure of the economy is summarized in the table below:

TABLE 1.1.

SECTORAL CONTRIBUTION TO THE TOTAL GROSS DOMESTIC PRODUCT
1970 - 1985 (PERCENTAGES AT 1970 CONSTANT PRICES)

SECTOR	1970	1975	1980	1985
AGRIC.	30.8	27.7	22.8	20.3
MINING	6.3	4.6	10	10.1
MANUF.	13.4	16.4	19.9	19.1
CONST.	3.9	3.8	4.6	5.1
SERVICES	35.3	36.8	39.9	44.0

SOURCE: MALAYSIA FIFTH MALAYSIA PLAN; 1986-1990; GOVERNMENT
PRINTER, KUALA LUMPUR. 1986.

From the above table 1.1 it can be seen that although ,in 1970 the agricultural sector contributed about 30.8 % of total GDP, by 1985 its contribution declined to 20.3 % of GDP .On the other hand manufacturing has increased from 13.4 % to 19.1 %. The tertiary and services sector is also becoming important and its contribution to GDP rose from 35.3 % to 44 %.

COUNTRY TRADE SECTOR.

1.7 Malaysia has an open economy. The import and export sector plays an important part to that economy. A substantial part of this trade passes through the ports. This means to undertake all the trade ports are important to the country. The importance of trade in an economy can be indicated by the foreign trade index as in Table 1.2 below:-

TABLE 1.2
FOREIGN TRADE INDEX

YEAR	GROSS EXPORTS \$MILL	GROSS IMPORTS \$MILL	GDP \$MILL	FOREIGN TRADE INDEX
1980	28,171	23,451	53,538	0.96
1981	27,109	26,604	57,821	0.96
1982	28,108	28,968	62,695	0.91
1983	32,828	30,721	69,910	0.99
1984	38,674	32,962	79,634	0.90
1985	38,327	30,558	82,829	0.83

NOTE: Foreign Trade Index = $\frac{\text{Gross Export} + \text{Gross Import}}{\text{Gross Domestic Product}}$

1.8 The major imports and exports of Malaysia are as follows :

EXPORTS

Palm Oil
Rubber
Logs and Sawn Timber
Tin
Crude Oil and Gas
Manufactured Products

IMPORTS

Rice
Grain
Fertilisers
Petroleum Products
Finished Goods

THE ECONOMY AND GROWTH OF TRAFFIC IN MALAYSIAN PORTS

1.9 The economic growth in Malaysia has also led to growth in maritime activity. The increase in port traffic was particularly significant. Nearly all the export and import trade including some entreport were carried by ships. On the whole a total of 41.6 millions metric tonnes of cargo were handled by all the ports in Malaysia in 1985 compared to 23 million tonnes in 1980 and 10 million tonnes in 1970. This indicated that the flow of cargo at major ports has grown at the rate of about 12% from period 1980 to 1985.

1.10 The composition of cargo throughput handled by major port has also changed over time. The growth in bulk cargo is significant, growing from 1.6 million metric tonnes in 1980 to 4.8 millions in 1985. Liquid cargo was next in importance increasing from 6.1 to 14.4 million metric tonnes over the same period. Containerised cargo doubled from 2.2 million tonnes in 1980 to 4.5 million in 1985, registering a growth of about 14.9 % per annum; while general cargo recorded a growth rate of 5.7 % per annum

increasing from 13.5 million tonnes in 1980 to 17.9 million tonnes in 1985.

1.11 From examining cargo tonnage and economic growth of the country, it can be shown that there exist a strong positive relationship between Malaysian GDP and levels of port tonnage as indicated in table 1.3:

TABLE 1.3
GDP AND TOTAL PORT CARGO.

YEAR	TOTAL CARGO (LOADED AND UNLOADED) (MILLION TONNES)	GROSS DOMESTIC PRODUCT. AT CURRENT PRICES. (M \$MILLION)
1975	28.0	22,332
1976	34.0	28,085
1977	40.5	32,340
1978	46.7	37,886
1979	49.8	46,524
1980	50.4	53,538
1981	52.4	57,821
1982	58.3	62,691
1983	67.4	69,910
1984	67.5	79,634
1985	70.2	82,829

SOURCE : MALAYSIAN ECONOMIC REPORT, MINISTRY OF FINANCE.

Note Let C =Total Cargo

G =Real GDP

The correlation coefficient between C and G was found to be 0.974.

C.PORT ADMINISTRATION IN MALAYSIA.

1.12 In Malaysia sea bound traffic can only occur in areas declared by the government as ports in order to enforce safety regulations as founded in Malaysian Shipping Acts and ordinances. Ports in Malaysia are classified as major and minor ports. Although all the ports as such are under the control of government, not all the ports are under the government administration. Some minor ports and jetties are run by private operators which in fact is not considered as port of national port administration.

1.13 The national port administration falls under state and federal jurisdiction. All ports in Peninsula Malaysia as well as Bintulu Port in Sarawak and Labuan in Sabah are declared as federal ports and as such under federal jurisdiction. On the other hand all other ports in the States of Sabah and Sarawak are state ports and are under the jurisdiction of the respective states.

1.14 To enable major ports to operate as efficiently as possible, from 1985 the federal government established port authorities to manage ports. There are now 5 port authorities namely the port authority of Klang, Penang, Johor, Kuantan and Bintulu.

1.15 For the minor ports no port authorities has been established. Except in Malacca port which is under the purview of Klang Port Authority, all the other minor federal ports are operated and managed by the Federal Marine Department.

1.16 Within the federal level the Ministry of Transport is

the agency responsible for all matters regarding ports and shipping. The Ministry is basically involve with matters pertaining to policy whilst the ports are left on their own on day to day operational matters. However in reality the ports are really independent partly caused by a lack of control and this has resulted in individual approaches to development.

1.17 Besides the activities of the port authorities some port related activities are also undertaken by the private sector. In port of Penang, Johore and Kuantan stevedoring and cargo handling services are provided by the private sector. In other ports the role of the private sector is more limited. A recent policy development by the government is to implement privatisation of ports in the country. In this connection, the major container terminal in the country, the Klang Container Terminal has been privatised and being wholly operated by a private company. This policy by the government is being pursued actively and more ports are expected to be privatised in the future.

D. NATIONAL PORT POLICIES.

1.18 As ports are an integral part of the economy in Malaysia, clearly identified port objectives are important for the country. Port objectives in the country however changes with circumstances from time to time. In the early period of development the primary objective has been to provide adequate port facilities. Later when containerisation and port competition are becoming important a lot more emphasis were put on efficient management and improve productivity.

1.19 In formulating the country's national port objectives an area that requires active consideration is the position of the port of Singapore. The port has become a major transshipment center in the region and in direct competition with ports in Malaysia. Presently the Port of Singapore is handling about 30 % of Malaysia's import and export. With this development the present port objectives and indeed the general port policies are as follows:

- * To handle all imports and exports directly.
- * Minimise duplication and over building of port facilities.
- * To increase port productivity.

CONCLUSION.

1.20 Malaysia has open economy. She buys and sells manufactured products and commodities throughout the world. Ports are important to the trade and economy of the country. There is a correlation between economic growth and cargo traffic handled at the ports. The objectives of the port changes with time. With increasing port competition its present main objectives is to handle all exports and imports generated from the country's hinterland.

REFERENCES.

1. MALAYSIA, FIFTH MALAYSIA PLAN, 1986 - 1990; GOVERNMENT PRINTER, KUALA LUMPUR, 1986.

2. MINISTRY OF TRANSPORT- TRANSPORT STATISTICS.VARIOUS ISSUES.

3.MALAYSIA ECONOMIC REPORT 1985/86, MINISTRY OF FINANCE,KUALA LUMPUR 1985.

CHAPTER 2-CONTAINERISATION IN MALAYSIA.

A.DEVELOPMENT OF CONTAINERISATION IN THE REGION

2.1 Containerisation was first introduced between South East Asia and the rest of the world in the early 1970's. In Malaysia it first began in 1973. In the early days of containerisation the lack of container handling facilities led to some ports in the region (notably Hong Kong and Singapore) being developed as focal ports of call and transshipment centres. Both these ports have continued to maintain this role till today.

2.2 Deep sea container vessels are expensive to operate .For reasons of economy they call at fewer ports than conventional break bulk ships. The tendency is therefore to call at a few selected ports and the cargo feedered out to other ports in the region. These selected ports which are the main transshipment ports are known as load centre ports. According to Marti #1 the important factors resulting in some ports developing as load centre ports are as follows:

"

1)The inability of many ports to supply large volumes of cargo,thereby discouraging steamship lines to continue calling at wide range of ports;

2)The erosion of hinterland concept,whereby ports

no longer have exclusive control even of cargo generated in their immediate tributary area;

3)The introduction of door to door or point to point rates,thus shifting the choice of ports from the shipper to the shipping lines and

4)The acceptance of intermodalism together with intensified price and service competition ,hence permitting carriers to play one port against another. "

2.3 The above factors very much reflect the current position of ports in the Far East.In South East Asia ,with Singapore occupying the central position in the region,a number of shipping lines choose to load or discharge containers at that port.These containers are then relayed to neighbouring ports in Malaysia ,Thailand and Indonesia.These relay vessels vary in size from small coasters to second generation container vessels with a connecting main line service.

B-EXISTING SHIPPING SERVICES IN THE REGION

2.4 The Far East Region is approached by four principal trade routes :

1)From Europe and the Middle East via the Indian ocean;

2) From North America via the Pacific Ocean;

3) From Australia and New Zealand;

4) Round the World Services.

2.5 Ships coming to the Far East from Europe to Japan have to pass the whole Far East region and normally enter from the Malacca Straits. Two of Malaysia's container ports i.e Port Klang and Port of Penang are located along this busy straits. Presently these vessels call at several major ports en route. The usual ports of call are Singapore, Taiwan, Hong Kong, Korea and Japan. In many instances these ships also call directly at Port Klang and to a lesser degree at the Port of Penang. Other ports in the region are served by a multitude of feeder and relay vessels. On their return voyage to Europe some of the lines also called at Port Klang and Penang.

2.6 Vessels serving the Far East from North America take the Pacific route with Japan as the first country of call. Containers for South East Asia (including Malaysia) are normally fed from Japan, Taiwan, or Singapore with some of the services using more than one relay service for the containers to arrive at the final destination. Very few services between North America and Malaysia make direct call

at Malaysian ports. This is because of geographical reasons and factors discussed as in para 2.4

2.7 The Australian trade is served by a range of vessel types both roll on and roll off and lift on and lift off. These vessels make direct calls to peninsular Malaysian ports and to smaller ports in Sabah and Sarawak.

2.8 There are no less than three Round the World Services which are operating in the Far East region. There are no direct calls to Malaysian ports. All use Singapore as a load centre port where containers to and from Malaysia ports are relayed using feeder vessels.

2.9 In addition to the four main routes discussed above there are also short sea services that ply within the region. The major one is the service to Japan which makes direct call to Malaysian ports.

2.10 Of the four trade routes, the North Europe and Japan trade routes are important to Malaysia. These two trade routes account for approximately 70 % *2 of total imports and exports. Table 2.1 is a tabulation of 6 lines plying the Far East\ Europe trade route. The analysis is to determine ports of call either direct or feeder service to Malaysian ports and frequency of service. It is quite evident from

TABLE 2.1

TRADE ROUTE : NORTH EUROPE - FAR EAST - NORTH EUROPE (EXCLUDING RTW SERVICES)

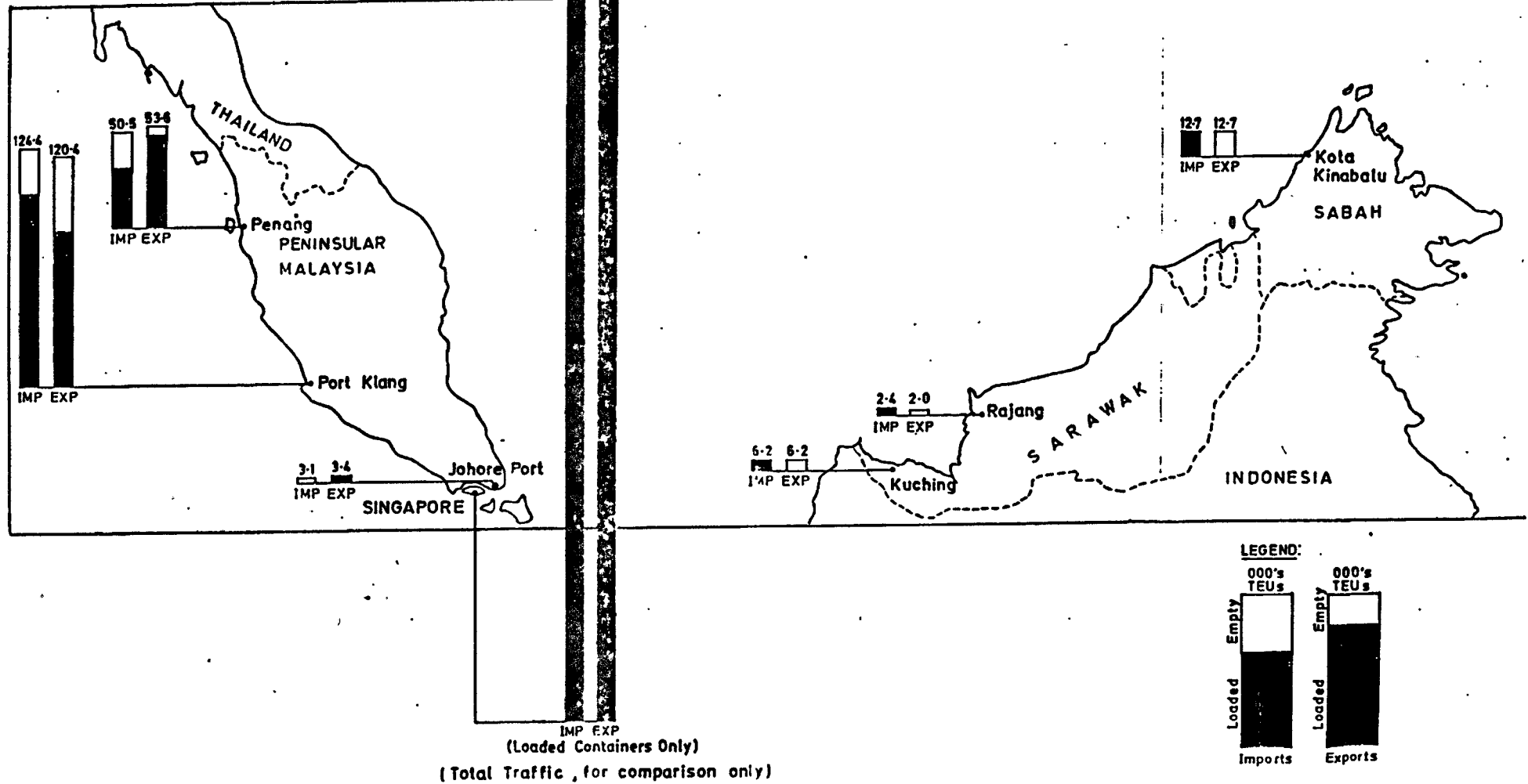
CONSORTIUM GROUP OR LINE	SHIPPING COMPANY OR OPERATOR	COUNTRY OF ORIGIN	COUNTRY OF DESTINATION	MALAYSIAN PORTS SERVED	DIRECT OR FEEDER	LOAD CENTRE PORTS	FREQUENCY OF SERVICE
ACE GROUP	Cho Yang (South Korea) Franco - Belgian Services CMCR (F) CMB (B)	United Kingdom & North Europe	Far East/Japan	Port Klang	F	Singapore	Fixed Day Weekly at Load Centre Port
	Kawasaki Kisen Kaisha (Japan) Korea Shipping Corporation (South Korea) Neptune Orient Lines (Singapore) Orient Overseas Container Line (Hong Kong)	Far East/Japan	United Kingdom & North Europe	Port Klang	F	Singapore	Fixed Day Weekly at Load Centre Port
BALT ORIENT LINE (Semi and Full Container)	Baltic Shipping Company (USSR)	United Kingdom & North Europe	Far East/Japan	Port Klang and Penang (Alternate Sailings)	F	Singapore	Approx. 10 days frequency
		Far East/Japan	United Kingdom & North Europe	Port Klang and Penang (Alt. Sailings)	D	-	Approx. 10 days frequency
COSCO	China Ocean Shipping Company (Peoples Republic of China)	United Kingdom & North Europe	Hong Kong & Peoples Republic of China	Penang and Port Klang	F	Singapore	Main Line Weekly, Feeder Two Per Month. Common Carrier.
		Hong Kong and Peoples Republic of China	United Kingdom & North Europe	Penang and Port Klang	F	Singapore	Main Line Weekly Feeder Two Per Month. Common Carrier.
MISC	Malaysian International Shipping Corporation	North Europe Far East/Japan	Far East/Japan North Europe	Port Klang Penang Port Klang/ Penang	D F F	- Port Klang Singapore	Twice Monthly (Train) Weekly at Load Centre Port.
TRIO GROUP	Ben Line Containers (UK) Hapag-Lloyd (GFR) NYK (Japan) MOL (Japan) P + O Containers Ltd (UK)	North Europe & United Kingdom	Far East/Japan	Port Klang Penang	D F	- Port Klang	Weekly (Train)
		Far East/Japan	North Europe & United Kingdom	Port Klang Penang	D F	- Port Klang	Weekly (Train)
SCANDUTCH	CGM (France) EAC (Denmark) Nedlloyd (Holland) Swedish Transocean Wm. Wilhelmsen (Norway) * Space sharing agreement with MISC	North Europe & United Kingdom * Via Feeder	Far East/Japan	Port Klang Penang	D F	- Port Klang	Weekly (Train)
		Far East/Japan	North Europe	Port Klang Penang	F	Singapore	Weekly at Load Centre Port

the table that most of the services to Malaysian ports are served by feeder service with the main port of discharge being Singapore. This has economic implications to the country. This aspect and the benefits of attracting direct service, would be discussed in chapter 3.

C - MAIN CONTAINER PORTS

2.11 The container ports in Peninsula Malaysia are Port Kelang, Penang and Johor Port. All are equipped to handle non-geared container vessels. Vessels carrying containers also call at the Sabah and Sarawak ports of Kota Kinabalu, Kuching, Sibu and Bintulu. These ports do not have gantry cranes and vessels calling there are self sustaining. Port Klang and Penang are the main container ports in Malaysia. Between them they handle about 87 % of the container traffic in the country in 1985. Figure 2.1 looks graphically at container ports in Malaysia comparing with the Port of Singapore. It compares in terms of boxes handled at each of the port. In 1985 Malaysian ports handled a total of 287,200 loaded TEU's compared to 1,256,100 loaded TEU's through the Port of Singapore. It also shows that Port Klang handles the largest number of containers in the country. A brief description of this main port in terms of container handling and facilities is discussed in the following paragraphs.

CONTAINER TRAFFIC
MALAYSIAN PORTS - 1985
 (in '000s TEUs)



PORT KELANG.

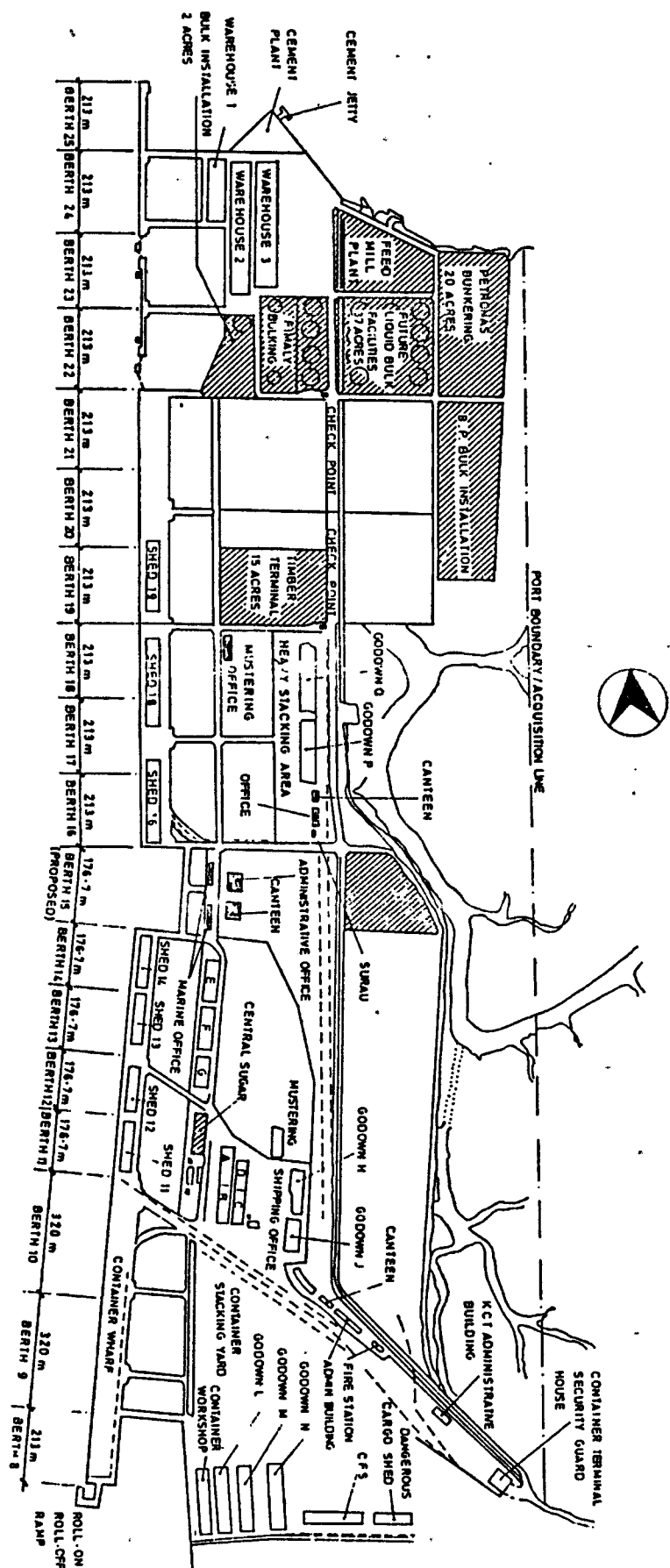
2.12 This is the premier port in the country. It consist of two port areas, North port and South Port.

2.13 The South Port, is the original port area consisting of eight berths, four for deep sea vessels and the remainder for coastal trades. This port is mainly used for general cargo operations and storage of cargo for coastal trade.

2.14 The North Port is of more recent construction. This new port had to be constructed because of demand for land needed for containerisation. This is the spatial effect of containerisation. This port consists of 17 nominated deep water berths including container, liquid and breakbulk. The total port area covers 248 hectares.

2.15 The Container terminal at the North Port occupies a land area of 44 hectares. A layout of this terminal is presented in figure 2.2. A land area of 14 hectares is used for stacking containers. The present yard capacity is 325,000 TEU's a year. The terminal is served by rail. The container terminal is made up of three berths with a total length of 853 metres. Depth alongside (berth no.8) is 11 metres for a length of 213 metres. Depth alongside (berth no 9 and 10) is 13.5 metres for the remaining length of 640 metres. Vessels of 40,000 displacement tonnes

FIGURE 2.2



PORT KLANG (NORTH PORT)

can be accommodated at berth no 8 and 60,000 tonnes at berth no 9 and 10. Berth no 8 is equipped with a roro bridge.

2.16 There are three godowns and a container freight station on the terminal. These sheds are used for stuffing, stripping, consolidating, delivering and receiving of LCL boxes.

2.17 As to the handling equipment the terminal is equipped with five 35 tonne capacity quayside gantry cranes. These cranes have telescopic spreaders and the booms have outreach of 33 metres. The cranes are capable of stowing a fifth tier of deck containers should this be necessary. The terminal on the quayside is well equipped to work on modern container vessels.

2.18 Container yard equipment consist of 21 straddle carriers. Each has 35 tonne lifting capacity. Six of the straddle carriers can only handle 20 foot containers but the remaining fifteen can handle up to 40 foot containers. During the early years of containerisation maintenance of the straddle carriers has been a difficult problem. Now with experience gained, the straddle carriers are in good running order with 75 % availability.

D - CONTAINERS HANDLED.

2.19 Imported containers into Malaysia consist mainly of manufactured goods and machinery from industrialised countries. Malaysia exports in containers mainly

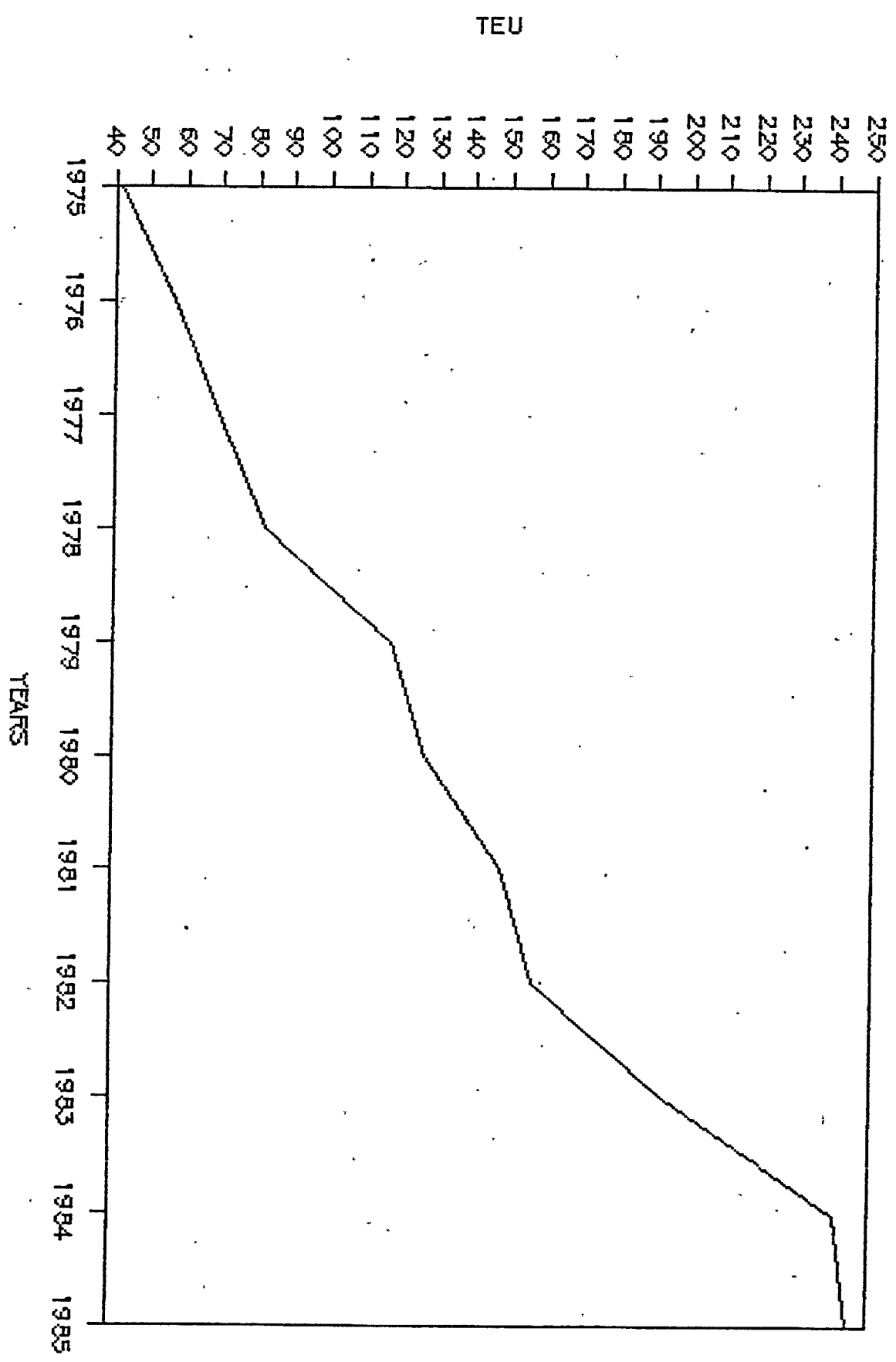
rubber, timber and timber products, tin ,cocoa ,textiles ,garments, manufactured rubber goods and high value electrical goods. Some 50% of Malaysia's rubber are containerised.

2.20 In 1973 the ports in Malaysia handled 13,321 TEUs. In 1985 a total of 244,800 TEUs were handled at the ports. Table 2.2 and Figure 2.3 below shows growth of containers over the periods of 1975 - 1985 .

TABLE 2.2.

YEAR	TEUs	% INCREASE
1975	41,887	
1976	56,940	36
1977	68,728	21
1978	82,273	20
1979	117,281	43
1980	127,055	8
1981	148,305	17
1982	157,231	6
1983	193,512	23
1984	240,752	24
1985	244,800	2

CONTAINERS HANDLED 1975 TO 1985



E. CONTAINER GROWTH RATES

- 2.21 The growth rates of containers do not show simple linear growth. Ross Robinson*3 in his article on containerisation in third world Asia says generally that growth would show exponential type functions.- Growth may show pattern of slow start and then a rapid growth period when shipping lines begin to switch their cargo volumes into containers. This growth will be followed by general levelling off towards a steady state pattern.
- 2.22 The growth rate in port Kelang seems to exhibit the above description. The period of rapid growth of switching from break bulk to containers may have already taken place and may exhibit a steady levelling off period. What can be expected is that future container growths be very much linked to rate of industrialisation in the country.
- 2.24 Growth patterns in containerisation can also be examined by looking at imports and exports of containers. Under a normal trading pattern a developing country exports raw materials and imports manufactured products from developed countries. In this situation exports are not containerised whilst imports are in containers. There is thus an imbalance of loaded containers coming in and empties going out. In the case of port Kelang empties which were high in the earlier years has levelled out to about 23 % of boxes handled.

F. PORT PERFORMANCE.

2.25 Port performance is crucial for containers. It determines how fast a ship discharges or loads containers and its stay time in port. An expensive container ship is not being productive if it spends too much time in port. Overall the whole terminal must be efficient. This starts from the ship's side operations to the final delivery of containers. A weakness in operation in any part of the system would undermine the overall efficiency of the terminal. On the ship side the availability of berth, numbers of working days, numbers of cranes utilised and productivity of cranes determine the speed of the ship/shore transfer operation. On the terminal operation the availability of machines and operational efficiency is important. The efficiency of the delivery system would finally define the smoothness of flow of containers from ship to hinterland or vice versa.

2.26 How does port Kelang measure in port efficiency? Records of ship side terminal efficiency are kept by shipping lines. Table 2.3 shows a record for TRIO Consortium container ships and comparative efficiency of 15 terminals *4. Overall the port is in an eighth position (capability per calendar day). However a comparison with its competitor, the port of Singapore, makes productivity at the port unequal to its neighbour a very significant factor. The port of Singapore is the best performer among the fifteen ports. Essentially it is because of the numbers of cranes used and crane productivity. With this capability certainly the port of

TERMINAL PERFORMANCE OVER THE LAST AVERAGE SAILINGS

JULY - SEPT 1987

TABLE 2.3

Port	Container Exchange	Gross Rate per Crane	Nett Rate per Crane	Number of Cranes used	Normal Working hours per day	Capability per Calendar Day	Schedule Day required
HAMBURG	1007	21.40	24.76	2.30	22.5	1107	0.91
BREMERHAVEN	329	21.48	24.64	2.37	22.0	1120	0.29
ROTTERDAM	822	18.12	19.43	2.37	22.25	956	0.86
LE HAVRE	238	23.36	26.44	2.00	18.0	841	0.28
SOUTHAMPTON	1089	16.65	19.59	2.73	20.0	909	1.20
PORT KLANG	373	23.93	23.93	1.81	24.0	1040	0.36
SINGAPORE	990	24.02	25.06	2.81	24.0	1620	0.61
HONG KONG	1205	18.81	18.99	3.03	24.0	1368	0.88
KAHHSIUNG	1477	25.30	26.12	1.31	23.0	762	1.94
KOBE	1301	24.98	25.87	1.94	16.5	800	1.63
TOKYO	1543	25.37	26.54	2.46	17.0	1061	1.45
BUSAN	1085	19.50	20.81	2.01	20.0	784	1.38
JEDDAH	985	23.59	25.07	2.05	24.0	1160	0.85
JAGOYA	527	31.50	32.36	2.01	20.0	1266	0.42
SHIMIZU	336	28.77	32.07	1.72	19.5	965	0.35

SOURCE: TRIO CONSORTIUM, KELANG CONTAINER TERMINAL

Singapore is an attractive port of call and understandably the load centre port in the region.

2.27 Container delivery or the transport of containers to and from hinterland is important. A bad system will upset port operations and its efficiency. In the case of port Klang the delivery system can be improved. Delivery of containers is mainly carried out by road container haulage. Only 3 companies are licensed to do this. In a World Bank Transport study *5 it commented that "the oligopoly in road container transport has made the cost of this service more expensive than neighbouring countries like Singapore." As a result container haulier rates are more expensive than break bulk transport, even though container haulage should offer the lower rate since less handling is involved. One effect of this is that container traffic is unstuffed at the port to be carried by lower cost conventional trucks. This is contrary to the container door to door concept.

2.28 One other problem arising from this controlled licensing of hauliers is that the haulier provides only adequate capacity for normal amount of traffic. In times of seasonal increase in traffic, where large numbers of boxes are handled in one or two months, there would not be enough capacity to deliver the boxes. This leads to piling up of boxes in the container yard resulting in congestion.

2.29 The solution to the delivery problem at port Kelang is quite evident. There is a need to remove restrictions on the movement of containers and encouragement of competition to reduce transport cost.

CONCLUSION

2.30 Containerisation in Malaysia has come a long way. From its beginning in the early 70's in the region, some ports have grown to be the load centre ports whilst others loses its importance to become feeder ports. Port Kelang is somewhere in between this two positions. In order to establish itself as an important port in the region it has to be efficient. This would be one condition for ships to make a direct call.

REFERENCES:

- *1. C.Marti, Current Pacific Load Centres.
Maritime Policy and Management 1988 volume 15
Jan - March 1988.
- *2.Malaysian Yearbook Statistic 1985;Department of
Statistic,Kuala Lumpur,Malaysia.
- *3.R.Robinson ,Containerisation in Ports of the
Third World Asia :An Overview of the Present Pat-
terns and Directions of Future Growth.
Maritime Policy and Management 1985 Vol.12; No.1.
- *4.Kelang Container Terminal Operations Report ;Oc-
tober 1987
- *5.World Bank Report ,Malaysia National Transport
Policy Review 1987.
- 6.G.De.Monie, Port Productivity ;Analysis Berth
Throughput.Unctad Manual on Port Management.

CHAPTER 3--SINGAPORE TRANSHIPMENT CENTRE AND THE COST TO THE MALAYSIAN ECONOMY.

A INTRODUCTION

3.1 The year 1986 was a very succesful year for the Port of Singapore Authority. It handled about a third of Malaysia's International trade and the port surpassed the 2 million TEUs mark in the handling of containers. In South East Asia the port has become dominant and edging itself competitively closer to Hong Kong and Kaoshiung in Taiwan. The Port announced that it "Will spend approximately \$1.5 billion (Singapore dollars) over the next five years on a number of development projects to cope with future increases in container throughput"*1

3.2 The fortunes of Malaysian ports have not been so good. More and more of the country's international trade is moving via Singapore. This is clearly indicated in table 3.1 and table 3.2 showing Malaysian exports and imports via Singapore. In 1970, the Singapore port handled a total value of M\$1,134 million of exports and reexports and M\$320.4 million of imports; by 1985, the ports handled a total value of M\$7,356.8 million in exports and reexports and M\$4,827.8 million in imports. Although the values have not been discounted over time for proper comparison the values however show quite evidently that there has been a substantial use of the port of Singapore as a transshipment centre. This further has occurred despite stated Malaysian port

TABLE 3.1

MALAYSIA EXPORTS* VIA SINGAPORE, 1970-1985

(M\$ million)

	1970	1972	1975	1978	1980	1982	1985
Food	121.3	147.3	234.3	292.2	356.2	402.1	659.6
Beverages & Tobacco	7.2	7.0	10.8	13.6	19.6	17.1	21.1
Crude Materials	573.5	491.9	717.4	1,044.3	1,567.8	883.5	578.5
Mineral Fuels, Lubricants, etc.	169.1	200.9	283.9	167.3	1,604.9	3,878.9	2,726.5
Animal & Vegetable Fats & Oils	92.7	116.3	225.2	286.6	810.9	602.1	1,281.9
Chemicals	14.7	17.9	35.9	247.7	73.9	82.2	105.8
Manufactured Goods	46.5	71.2	116.9	23.1	336.7	366.0	392.8
Machinery Transport Equipment	53.2	48.8	214.6	414.7	520.2	678.8	1,388.1
Misc. Manufactured Articles	17.7	14.5	110.0	94.2	79.0	98.1	190.3
Misc. Transactions & Communications, etc.	17.3	14.7	15.1	11.5	16.02	12.3	12.3
Total Exports via Singapore	1,134.4	1,130.5	1,964.2	2,437.2	5,385.1	7,021.1	7,356.8
Total Exports in Malaysia	5,163.1	4,854.0	9,230.9	17,073.9	28,171.6	28,108.2	38,094.0
% Share of Total Exports via Singapore to Total Exports in Malaysia	21.6	23.3	21.3	14.3	19.1	25.0	19.3

Sources: Malaysia, Annual Statistics of External Trade, Department of Statistics, Kuala Lumpur, Volume I, Pt. I; various years.

Bank Negara Malaysia, Quarterly Economic Bulletin, Bank Negara Malaysia, Kuala Lumpur, various issues.

Malaysia, Fifth Malaysia Plan, 1986-1990, Government Printers, Kuala Lumpur, 1986.

Note: Exports and re-exports via Singapore is defined as the transshipment of cargo from Malaysia through Singapore, to other areas other than Singapore. The value of Malaysia's exports and re-exports via Singapore are broken down into major categories of commodities. Exports is defined as goods (of local produce/manufacture) that are taken out of the registration area; while re-exports are goods that are taken out of the registration area in the same form as they have been imported without any transformation. The total value of goods exported to Singapore (or goods retained in Singapore) is very small and thus, can be considered negligible in this case.

TABLE 3.2

MALAYSIA IMPORTS VIA SINGAPORE, 1970-1985*

(M\$ million)

	1970	1972	1975	1978	1980	1982	1985
Food	54.2	58.5	63.2	31.3	112.2	89.2	78.5
Beverages & Tobacco	4.41	3.9	4.3	3.4	12.3	13.6	4.3
Crude Materials	21.2	6.5	9.5	19.4	42.8	47.8	57.7
Mineral Fuels, Lubricants, etc.	81.3	128.6	297.4	325.9	1,502.6	2,773.5	2,450.6
Animal & Vegetable							
Fats & Oils	5.8	5.4	4.1	5.6	13.2	20.3	23.6
Chemicals	17.1	21.1	34.7	50.7	11.6	148.9	297.6
Manufactured Goods	66.1	71.8	100.0	118.9	254.8	310.4	303.6
Machinery Transport Equipment	13.6	14.9	131.0	223.2	543.2	589.9	1,391.4
Misc. Manufactured Articles	24.0	26.2	59.4	79.5	105.4	124.2	145.8
Misc. Transactions & Communications, etc.	32.7	28.0	18.2	20.1	50.2	47.0	74.8
Total Imports via Singapore	320.4	364.9	721.8	877.7	2,752.9	4,164.7	4,827.8
Total Imports in Malaysia	4,288.4	4,543.2	8,530.4	13,645.9	23,451.0	29,123.0	30,740.0
% Share of Total Imports via Singapore to Total Imports in Malaysia	7.5	8.0	8.5	6.4	11.7	14.4	15.7

Sources: Malaysia, Annual Statistics of External Trade, Department of Statistics, Kuala Lumpur, Volume I, Pt. I; various years.
 Bank Negara Malaysia, Quarterly Economic Bulletin, Bank Negara Malaysia, Kuala Lumpur, various issues.
 Malaysia, Fifth Malaysia Plan, 1986-1990, Government Printers, Kuala Lumpur, 1986.

Note: Imports via Singapore is defined as the transshipment of cargo to Malaysia through Singapore, from other areas other than Singapore. The value of Malaysia's imports via Singapore are broken down into major categories of commodities. Imports is defined as goods that are brought into the registration area (whether direct or into bonded warehouses) irrespective of whether such goods are for consumption, for processing for use in manufacturing or for subsequent re-exports/re-shipment to other countries. The total value of goods imported from Singapore is very small and thus, is considered negligible in this case.

objectives of encouraging direct calls and greater utilisation of domestic ports.

- 3.3 The significance of all the above development is that the port of Singapore has become a major load centre in the region and large volumes of Malaysian cargo are transhipped there before reaching domestic ports.

B.COST TO THE ECONOMY.

- 3.4 What is the cost to the Malaysian Economy as a result of Singapore's role in the Malaysian import\export trade? From Tables 3.1 and 3.2 the total value of Malaysian imports and exports via Singapore in 1985 is estimated to have been M\$12.1 billion. Assuming a conservative estimate of 2% benefits (benefits resulting from payments within Malaysia of handling charges, transportation and insurance charges, agency charges and employment benefits) can be accrued if this total amount had been handled directly by Malaysian Ports the economy would have benefitted M\$242 million in 1985. Even if 50% can be diverted the benefits would have been about M\$121 million.

C.BENEFITS OF DIVERSION OF CARGO.

- 3.5 As mentioned above there are benefits to the economy

for diversion of cargo. One direct consequence would be an expansion in the volume of cargo handled through Malaysian ports. This increase in traffic would bring in direct and secondary benefits as follows :

DIRECT BENEFITS

- 1) An important direct benefit of an expansion in traffic through Malaysian ports would be an increase in employment opportunities at the port. This is important. One consequence of containerisation was to create the problem of surplus labour at ports.
- 2) Improve port traffic would improve port financial performance and tax payments to the government.
- 3) Another direct benefit from the increase of Malaysian port traffic is it can improve the country's balance of payment position. By directly exporting and importing cargo through Malaysian ports, a large percentage of payments such as port charge, insurance, freight forwarding charges would accrue to the domestic economy. This saving in foreign exchange is in the order of millions of dollars.
- 4) Diversion of cargo may also have national strategic value. It is certainly in a country's interest, where avoidable, not to depend of a 'foreign' port for its trading activities

SECONDARY BENEFITS

3.6 Besides the above direct benefits, there are also several secondary benefits arising from the diversion of Malaysian cargo to Malaysian ports. These include the following:

- 1) Because Malaysian ports are nearer to most Malaysian importers and exporters, there could be a savings in inland transport costs for certain movements. As a result exports can be more competitive.
- 2) With the increase of volume of cargo through Malaysian ports then the ports would likely be able to enjoy economies of scale. This is so because ports have large overhead costs and an increase cargo tonnage and ships would reduce these fixed cost. This advantage would allow the use of specialised cargo handling equipment. These economies and specialisation would ultimately lead to greater efficiency, productivity and competitiveness in Malaysian ports.
- 3) The expansion in Malaysian cargo at Malaysian ports can also lead to greater utilisation of Malaysian owned ships. This can lead to savings in foreign exchange, increase in viability of shipping industry and an expansion in maritime workforce.
- 4) With expanded volume of cargo, then there is good potential that the port would attract major shipping lines for direct services and increase in frequency of shipping services.

5) A port is a catalyst to development. A port with increase cargo traffic would induce business and manufacturing activities in the country.

3.7 From the above assesment ,it is quite evident that there are distinct benefits to be derived from diversion of cargo to Malaysian ports from Singapore. However to present a balanced picture it has to be admitted that the fact that Malaysian importers and exporters prefer to ship their cargo through Singapore indicates from the port users point there are benefits to be derived from the use of the port. These benefits may include better financing and more responsive tariff rates offered by Singapore port. All this can be accounted by overall lower transport costs.

CONCLUSION.

3.8 Given the above, to compete ,Malaysian ports would have to offer comparative competitive advantage to Malaysian port users. Competition can be in the form of improving the efficiency levels of Malaysian ports, lower tariffs or a combination of both. One other way suggested in this paper is to introduce alternative transport routeing and this is discuss in the next chapter. But finally port users and shipowners must be convinced that there are clear benefits to gain for them to come to a port.

REFERENCES

- *1.Port of Singapore News -Volume 3, No. 4. 1986
- 2.Malaysia Economic Report;Ministry of Finance
various issues.

.CHAPTER 4. CONTAINER ROUTEING.

A. DEVELOPMENT OF CONTAINER ROUTEING PATTERN IN MALAYSIA.

- 4.1 In the not too distant past Peninsula Malaysia had two liner ports i.e. Port Klang and Port Penang. Each of this port has its own respective hinterland. Such an arrangement was logical in the days of break bulk cargo where general cargo ships call at each port in the country to collect even small amounts of cargo.
- 4.2 However the development of container shipping changed this pattern of routeing. Large and expensive container ships were not possible to follow the same routeing pattern as general cargo ships. What followed then was that some ports became main ports of call or load centre ports whilst others became 'feeder ports'
- 4.3 This is clearly evident by looking at container movement in Malaysia for 1985. For that year the total amount of containers generated were 475,000 TEUs. Out of this total in the Port of Penang 16,000 TEUs were shipped direct and another 88,000 TEUs were exported via Singapore port. In Port Klang out of the total of 245,000 TEUs in 1985 172,000 were shipped direct whilst 73,000 shipped via Singapore. In addition to this 126,000 TEUs from the Southern part of peninsula Malaysia moved overland for re-export via Singapore port.

4.4 This container routeing is presented graphically in fig. 4.1.

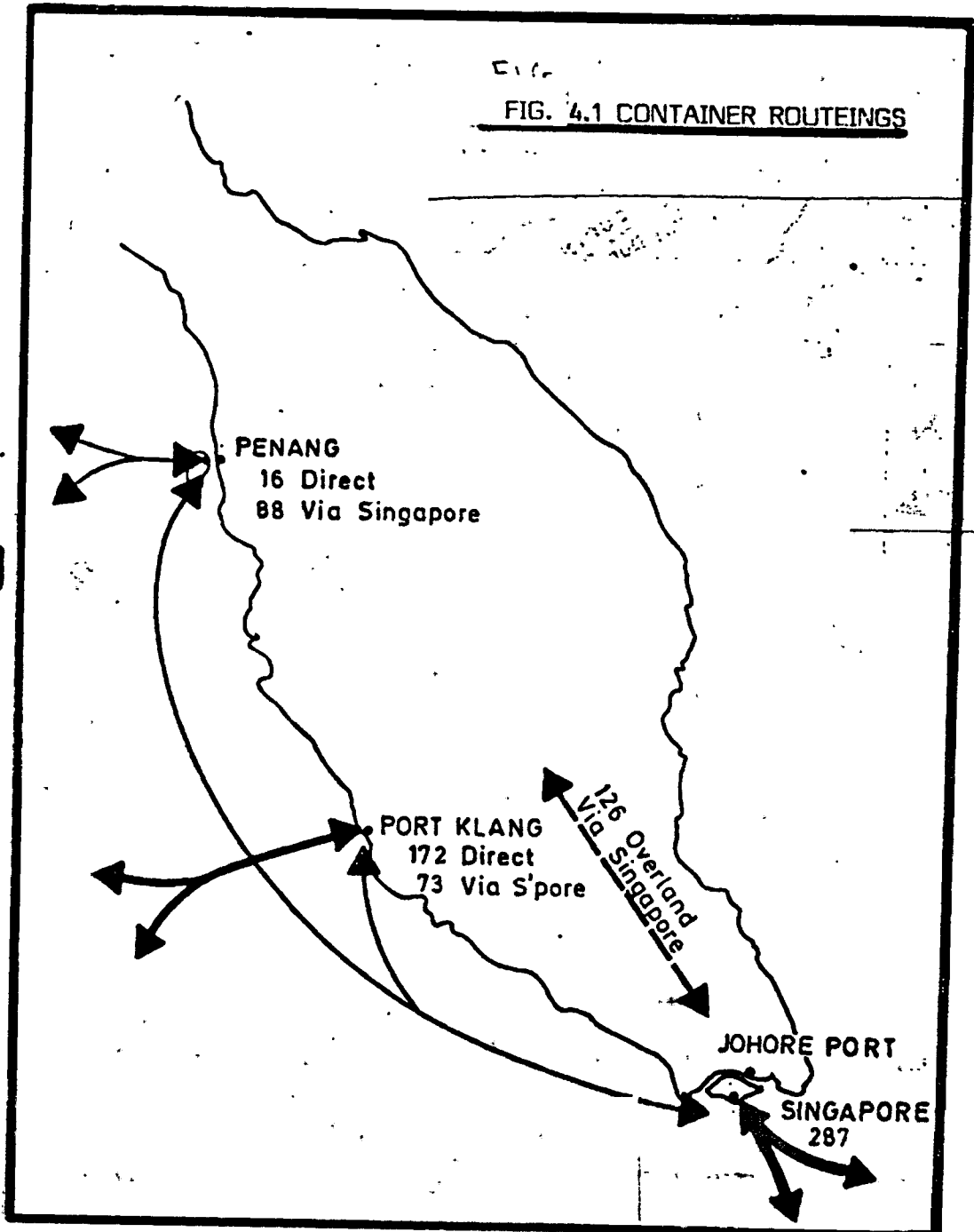
B. ROUTEING OF PENANG BOUND CONTAINERS.

4.5 The above development benefitted the port of Singapore and was a logical development for container shipping. However in the context of containers for Penang this route development was inefficient and expensive. This is because the containers are routed in the following manner:

Imports - Containers from Europe bound for Penang port remain on the mainline vessels as it called at port Klang and are on carried to port of Singapore and then moved to feeder vessels back to Penang. #1 Container from Asia to Penang are discharged at Singapore and forwarded to Penang by feeder even though the mother vessels call at Port Klang after Singapore.

Exports - To Europe from Penang are moved to Singapore by feeder vessels, loaded to the mother vessels which then sails back up the coast to Port Klang to load other containers to Europe

FIG. 4.1 CONTAINER ROUTEINGS



4.6 This routeing of Penang bound containers is expensive. It involves transshipment cost in a foreign country and the container boxes need to be handled twice at the port of Singapore. In addition there is loss of foreign exchange here. All these finally makes imports expensive and reduces the price competitiveness of exports.

C. MULTIMODAL ROUTEING.

4.7 An alternative routeing for Penang bound containers is for the boxes to be transhipped at Port Klang and be moved by rail to Penang. This is a multimodal routeing. The all sea movements can be substituted by a combination of sea and rail. There are a number of reasons why this routeing can be feasible:-

- 1) There are already good rail connections between Port Klang and Penang and the distance of 250 kilometres between these two places is a good economic distance for rail transport.
- 2) By having block train service for shuttle movement of containers from Port Klang to Penang it can reduce transport time. Time savings (rail as compared to ships) can be as much as a day.
- 3) It promotes the door to door concept of containerisation and brings full benefits of penetration of the 'box' to the hinterland.

4)The proposed routeing can be cheaper because there is a reduction of port handling.The box is now handled only once compared to three times in an all sea movements(twice at the Singapore port and once at Penang port)

4.8 Besides being feasible there is another reason why this multimodal routeing is attractive.It makes Port Klang the consolidation centre for boxes. Rather than each port feedering small numbers of boxes to Singapore it now allows the opportunity to make Port Klang a Malaysian load centre.This brings the prospects of direct shipping calls,frequency of service and in many ways fullfills the need to divert cargo as discussed in chapter 3.

4.9 The opportunities that this multimodal routeing offers are tremendous.The Malaysian railway system has a direct linkage with the railways of Thailand. The movement of container boxes from the Port of Klong Toey in Thailand has followed a similar pattern as ports in Malaysia.Container boxes are feedered by an all sea movement to Singapore.In addition due to the rapid economic growth experience in Thailand nowthe port is having capacity problems#2.These growing changes make a multimodal routeing - a rail connection moving containers between the Port of Klong Toey in Bangkok and Port Klang a feasible project.There are economic advantages to be gained on both sides.The new routeing overcomes the present congestion problem at the Port of Klong Toey and the railways of Thailand can benefit from this service rather than foreign vessels ferrying container boxes to Singapore.

In the Malaysian context Port Klang would benefit vastly from an increased traffic and enhance its position as a consolidation centre discussed in para 4.8.

- 4.10 It is quite evident that there is a tremendous potential for developing a new multimodal transport routeing. The reason it has not developed so far is that the "all sea movement" is an established standard and, as expected, there is an inertia to change. Another important reason is that multimodal transport is really a new form of cargo movement. It requires changes particularly with regard to commercial practices. This important changes and requirements are discussed in chapter 6.

NOTES AND REFERENCES.

*1. One reason for this peculiar movement is because of Malaysian custom regulations. Goods transhipped at Port Klang bound to another Malaysian port is considered as imports and duty need to be paid in Port Klang. This requirement is cumbersome and shippers in Penang prefer that their goods be transhipped in a foreign port like Singapore and imported directly to Penang. This outdated custom legislation however is now being revised.

*2. Financial Times ,5 August 1988, "Bangkok infrastructure cannot cope with rapid growth"

CHAPTER 5 -MULTIMODAL TRANSPORT.

A. WHAT IS MULTIMODAL TRANSPORT.

5.1 The term multimodal transport and intermodal transport has been used interchangeably. It however means the same thing. The expression intermodal seems to be used to a large extent in the North American Continent. Multimodal transport seems to be the official term and the United Nations Convention on this subject uses this term.

5.2 The United Nations Convention on International Multimodal transport of Goods (the MT convention) defines Multimodal transport as :

"the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country."

5.3 From the above definitions the important elements for a multimodal transport are :-

- # at least two different modes of transport
- # a single contract document covering the whole journey
- # from one country to another country
- # a multimodal transport operator.

5.4 A multimodal transport operator is defined in the convention as :

"...any person who on his own behalf or through another person acting on his behalf concludes multimodal transport contract and who acts as principal, not as an agent or on behalf of the consignor or of the carriers participating in the multimodal transport operations, and who assumes responsibility for the performance of the contract "

The operator is simply one who undertakes to arrange the through transport of goods using more than one mode of transport and issues one transport document for the entire journey.

5.6 For multimodal transport to occur there must be different modes of transport, different countries, one transport document covering from source to destination. In addition one organisation is responsible for all the transport contract involved in the through movement of goods from source to destination and who acts as a principal and not as agent.

5.7 From the above, multimodal transport is therefore a system that allows goods to be moved combining different modes of transport. The development of multimodal transport once it has taken place may have implications on future development of shipping and ports and these are discussed below.

B. MULTIMODAL TRANSPORT AND CHANGES IN SHIPPING INDUSTRY.

5.8 Structural changes in shipping have contributed to the development of intermodal transport in the 1980's. The container shipping industry has for quite some time been frustrated by declining freight rates and problem of

overtonnaging. Shipowners facing fierce competition has to rationalise their operations and to seek new ideas to survive. One direct action has been the shift of shipping companies in the western world to the flags of convenience to circumvent the problem of high cost, taxes and restrictive regulations. The other reaction is to increase the size of vessels so that it reduces the cost per slot in container ships. There has now been orders for construction of container ships by American President Lines that are "Panamax plus" in size. This development is significant for multimodal transport. These "panamax plus vessels" marks a new stage for containerisation. These vessels will be the first container ships not being able to pass the Panama channel. What it means is that these vessels on the pacific route will transship their boxes on the western coast of United States and be dependent on rail to move their boxes on the eastern coast. This marks the linkage between these vessels and and their dependent on rail to provide an integrated transport system on that route.

5.9 In some ways regulatory changes in the United States have made a direct impact to the development of multimodal transport. Under the Shipping Act of 1984 the act allowed conference ships calling at United States port to have intermodal tariffs i.e. a single rate covering the cost of ocean freight, port cost and land transport from origin to destination. It has been argued that this act would have the effect of promoting future multimodal services to be offered by shipping lines.

5.10 The conference system has always been the feature of liner shipping. One main reason why Malaysia invested into the shipping industry is because of the monopolistic

practices of the Far Eastern Freight Conference (FEFC). However with multimodal transport it is expected that the conference system would be weakened. "The conference system has traditionally negotiated rates primarily on ocean borne trade routes. Door to door service accompanied by a through rate and one bill of lading certainly does not fall into the traditional practice of the conference. In order to cover the inland segments of the multimodal movements of cargo, the conference would have to stretch their jurisdiction beyond the port, as many individual shipping companies did in their operations. This move however, would not solve the problem. Through rates for a cargo shipment from one inland origin to another inland destination cover a complex of origin - destination routes that is much more to control than was the isolated ocean portion of the voyage in the pre-intermodal era. The negotiation apart from the conference framework of inland transport rates by its members is not a long-term solution from the conference point of view; on the contrary, its acts to weaken the conference themselves." #1

5.11. The conference system has also additionally to face another kind of problem with multi modal transport. This is the development of non-vessels owning common carriers operators (NVOCCs). These operators may include freight forwarders, large shippers, shipping association or possibly owners of other modes of transport especially rail. With the development of NVOCCs the ability of conference system to fix rates would be considerably weakened.

C. MULTIMODAL TRANSPORT AND ITS IMPACT ON PORTS.

5.12 The development of containerisation brought with it the door to door movements. With this concept ports have been seen as a point to be passed in order to reach a destination. This in some ways reduced the importance of ports as an important focal point. As a result of this development ports in responding to this changing environment are now beginning to play a more expanded role in the transport chain. Quite a number of ports now are beginning to offer consolidation services to both shippers and shipping lines with the setting up of inland container depots and also to act as a transfer points from ships to railroad.

5.13 The development of multimodal transport would also have some bearing on interport competition. A port would have to be seen not only as much as the facilities it offers but also the accessibility of the port to the inland transport routeing. The port can in fact work together with the rail system to promote and market its integrated inland services. "A shipping company may select a port of call, not on the merit that it provides cheaper services, but on the basis of a comprehensive analysis of the total route. It may, in fact, choose to call at a more costly port because of the advantages of inland transport or ocean routes/ to this port overcome the additional port costs" #2 Indeed the position of port Klang, with its railway connection and the absence of it in the Port of Singapore should be seen in this light. Intermodalism can change cargo routeing and with the increasing importance of railways it may open new hopes for smaller

ports. However in multimodal transport it not just the infrastructure that matters. What is more important is the development of commercial practices and institutional support. This important aspect is discussed in the next chapter.

References:

*1. Yehuda Hayuth ; Intermodality : Concept and Practice
Pg. 46

Lloyds of London Press Ltd. 1987

*2. Ibid pg. 71.

CHAPTER 6. COMMERCIAL REQUIREMENT OF MULTIMODAL TRANSPORT.

A.INTRODUCTION.

6.1 It was noted in earlier chapters that multimodal transport is really a 'system'. It has to do very much on the arrangement on how goods are moved, combining different modes of transport into one total movement. Here it is the arrangement or the 'software' system that is important rather than the 'hardware' of cranes, trucks, ships and train. This is particularly true in the case of Malaysia as the country has quite extensively developed its infrastructure.

6.2 In view of the above for the successful introduction of multimodal transport in the country it is important that the system be in place. At the present the transport or the movement of goods in the country has traditionally been serviced by an 'all water' movement. As result the business sector and the banks are only familiar with 'on board bills of lading' in order to negotiate letters of credit. Similarly government regulations particularly the customs are also working in line with this practices. With the introduction of multimodal transport there is a need to institute new commercial practices. Some of the developments in this area are discussed below.

B.DEVELOPMENT OF NEW INCOTERMS.

6.3 Commercial contracts between buyers and sellers involving foreign trade use standard terms. These terms are known as incoterms and are developed by the International

Chamber of Commerce(ICC).

6.4 In the past buyers and sellers of goods have conducted business on the basis of the ship's rail being the named point or the datum point for the transfer of responsibility from the seller to buyer. Incoterms such as CIF, FOB, and C & F all use ship's rail as datum point.

6.5 With containerised cargo, inspection at the ship's rail is not possible and therefore new incoterms has been developed. These take into consideration the new transport technology of containerisation and the impacts of combined transport services. The most important incoterms are:-

FRC - FREE CARRIER (NAMED POINT)

This is based on the same main principles as FOB except that the seller fulfills his obligations when he delivers the goods into the custody of the carrier at the named point. The risk or loss or damage to the goods is transferred from seller to buyer at that time and not at the ships rail.

DCP - FREIGHT CARRIAGE PAID TO (NAMED DESTINATION)

This means that the seller pays the freight for the carriage of the goods to the named destination. Risk of loss or damage to the goods is transferred to the buyer when the goods have been delivered into the custody of the first carrier and not at the ship's rail.

CIP- FREIGHT CARRIAGE AND INSURANCE PAID TO(NAMED DESTINATION)

This is the same as the previous term but with the addition that the seller has to procure transport insurance against the loss or damage of goods during carriage. The seller contracts with the insurer and pays the insurance premium.

C.DOCUMENTARY CREDITS.

6.6 Together with the new incoterms the International Chamber of Commerce also published a document known as ICC 400- a uniform system of documentary credits. This document clearly sets out the responsibilities of the buyer and the seller when using the various incoterms as far as documentary credits are concerned. Relationship between incoterms and documentary credits system are also clearly indicated.

6.7 The new development by the International Chamber of Commerce also provide for international acceptance of a transport contract issued by a person or organisation in the same manner as a 'on board bills of lading'. There are also provisions for acceptance of seaway bills, electronic data transfer and other requirements for commercial and transportation activity.

D.SIMPLIFICATION OF CUSTOM PROCEDURES.

6.8 Customs around the world have also to change their system of operation to accomodate the commercial and

system of operation to accomodate the commercial and operational developments brought about by containerisation. With ship's rail no longer a datum point in the commercial sense, it was no longer appropriate for documents to be lodged and duty paid only at ship's rail i.e. at the port. A number of changes have been instituted for customs and the most important of these are the Custom Convention on Containers 1972, and the International Convention on the Simplification and Harmonisation of Custom Procedures 1973 (Kyoto Convention).

6.9 In the context of this paper, new customs regulations would have to be introduced in Malaysia with multimodal transport. Custom related activities can take place far inland at the inland container depot or the point of receipt or delivery of cargo.

E. BILLS OF LADING AND LIABILITY IN MULTIMODAL.

6.10 Bills of Lading acts as receipt for goods, contains the terms of the contract of carriage and it is the document of title to the goods. In the "all water movement" the on board bill of lading is the main document used commercially. With changes in transport pattern and routeing where goods are moved by more than one carrier or mode of transport the through bill of lading is used.

6.11 The through bill of lading came about to meet the need where cargo was delivered by more than one shipping line. By arrangement between different shipping companies or even extending to land transport a through bill of lading was issued. "The various companies involved - whether shipping lines or rail companies would cooperate

issue the bill covering the entire transport which would be recognised by the on carrier as governing his section. Various types of contractual arrangements were possible but the most common was for each stage of the transport to be kept separate with each operator making themselves responsible for their own section only. The most usual technique and one still employed in the present day through bills is for the first carrier to undertake the normal responsibilities for his own section and then to act as forwarder in respect of the later sections bringing the on carrier into a contractual relationship with the shipper."*1.

6.12 The through bill of lading, where the contract is in separate stages and the issuing sea carrier accepts responsibility only for his part of transport and acts as agent for the remaining part - is a disadvantage to the cargo owner. A cargo owner would not be impressed with this arrangement and given a choice, as in the case of Malaysia (all water movement competing with multimodal arrangement) the cargo owner would certainly opt for the safety of established practice in the traditional on board bill of lading.

6.13 As a result of the "inadequacy" of the through bill and the need for a "total contract" rather than a segmented one, there has been many attempts by international bodies to produce an international convention on combine transport. The Comité Maritime International took the lead and formulated the TCM convention. This convention is however not finalised and superseded by the Unctad convention on multimodal transport. This convention again has not received wide acceptance for it to come into force.

6.14 In the absence of applicable convention for multimodal transport the ICC published a voluntary code for combined transport entitled Uniform Rules for Combined Transport Document*2. Under this rules it provide for a "combine transport bill of lading" to be issued which can be either in negotiable or non negotiable form. The person or company who issues the bill is known as the "combine transport operator". Basically the combine transport operator would offer the convenience of of combine transport contract to the cargo owner. This combine transport document can be offered under ICC rules where the combine transport operator accepts full responsibility for the performance of the combine transport, as well as liability ,throughout the entire transport. This is the significant difference of the combined transport bill of lading from the through bill of lading. In the former, the issuer, accepts full responsibility for the entire movement (ICC rule 5[e])and also acts as principal with the cargo owner and other carriers. In the latter, the issuer accepts responsibility only for his part of carriage and then acts only as agents for the cargo owner and other carriers.

6.15 As for cargo liability, under the ICC combine transport rules, where loss or damaged occurred is not known ICC rule 11 provides for carriers liability very similar to Hague Visby rules. Rule 12 provide for situations where carrier can claim exemption and not liable for loss or damage.

6.16 Where the stage of transport where loss or damage occurred is known then ICC rules 13 applies. The combine transport operator is liable to the consignor under what

is known as "network principle". This is the uni-modal transport system of liability provided for by relevant international convention or domestic law.

6.17 The above ICC rules" have been followed by a number of combine transport operators either through incorporation or through simple imitation"*3. One example of this is the COMBIDOC issued by The Baltic and International Maritime Conference (BIMCO) and the International Shipowner's Association (INSA). The COMBIDOC together with ICC rules are attached at the appendix of this paper.

6.18 The ICC rules seems to provide a workable basis for multimodal transport. In the absence of a governing convention it meets the general commercial need. The application of the rules is by mutual agreement by both parties to incorporate it as part of their contract.

F. MULTIMODAL COMMERCIAL PRACTICE.

6.19 The result of all the above development is that it allows multimodal transport to function. A combine transport bills of lading can be issued to the shipper at the time goods are received into the care of the first carrier at a point remote from the ships rail.

6.20 From the discussion in the earlier chapters this may be for example an ICD at Penang or Bangkok. In this case a "received for shipment" bill of lading may be issued by the carrier at the time the goods are received into the ICD. The issuing of the "received for shipment" bills of lading means the letter of credit can be negotiated

provided it has been so clausued.

6.21 Similarly, the named point may be "on board of rail". In this case responsibility for the cargo changes from buyer to seller when the cargo is loaded onto a rail wagon. Again the bill of lading may be issued on the basis of "received on board rail" provided such a provision has been made in the terms of the letter of credits.

6.22 This position to allow early negotiations of letter of credit is a significant and important one in the context of commercial requirements. Shippers both in Penang and Bangkok would not be attracted to a multimodal service if terms for negotiating their letter of credits are different and less efficient than the "all water transport". In this connection banks also play an important role. In the case of Malaysia, presently banks are unwilling to accept bills of lading issued upon receipt of cargo and instead only recognised bills of lading issued by shipping lines after cargo is loaded onto the vessels#4. This problem is closely connected with the liability and documentation aspects in multimodal transport. Here the application of ICC rules in combine transport document has been commercially acceptable and used in Europe could be the basis for application in Malaysia.

REFERENCES

- *1. David Glass, Shipping Law Into The 90'S; page 9
(British Council, July 1988) Unpublished.
- *2. ICC Publication 273; the current version is ICC 298,
published in 1975.
- *3. Chorley & Giles. Shipping Law. Eighth Edition, Pitman
Publishing.
- 4*. "Banking Practices of Malaysian Banks Hindering
Intermodalism" Shipping Times ; Friday 11 September
1987.
- 5. Incoterms. International Chamber Of Commerce
Publications.
- 6. Intermodal Asia Seminar Workbook ; 1988 Lloyds Of London
Press (Far East Ltd.)

CHAPTER 7. SUMMARY AND CONCLUSION.

7.1 Malaysia has a history as an international trading nation; the country buys and sells commodities and manufactured products in markets throughout the world. The vast majority of its international trade is oceanborne. As a result ports play a major role in the economy.

7.2 The introduction of containerisation in the region in the 1970's saw many changes in Malaysian ports. New port facilities and equipment were both developed and installed. Containerisation itself is now well rooted in Malaysia's trade. Most of Malaysia's containerisable import and export trade with Japan, North America and the European community is already in "boxes". In the future it is expected there will be further growth as some cargo trading partners like China begin to utilise containers and develop container ports in their country.

7.3 The changes in international transport which have accompanied containerisation, however, have not been limited to port equipment and facilities. In the effort to achieve the maximum economies inherent in the container concept, the shipping industry has caused other changes particularly with regard to port hinterland relationship existing in pre container days.

7.4 One important trend has been the development of "load centres". This load centering refers to the tendency of major shipping lines to limit their ports of call of their long haul vessels to a few strategic locations and from there to feed other regional ports utilising relay vessels. In the context of South East Asia the Port of

Singapore became the main load centre ports with other ports in the region including the ports in Malaysia as feeder ports.

7.5 There are a number of drawbacks if ports in the country are just being used as feeder ports. One obvious disadvantage is loss of revenue. Others are that a country becomes dependent on foreign ports and also domestic ports which are built with large and adequate capacity are not being utilised fully. .

7.6 In the case of Malaysia one primary objection to the development of feeder services is the transport routeing that has taken place. In the case of containers bound for the port of Penang it has been shown that the present transport routeing is inefficeint. In addition it can also be expensive because of extra handling at the port of transshipment.

7.7. It is in this context that multimodal transport is argued for in Malaysia. As the country has been handling containers the last fifteen years it is expected that the next logical area of development would be the introduction of multimodal transport. With its developed railway system the use of multimodal transport may in fact provide new opportunities. It is possible with multimodal transport new cargo routeings can be developed. And this may present the potential for Port Klang to develop as a load centre.

7.8 For the implementation of multimodal transport in Malaysia the emphasis is in having the "system" in place rather than the infrastructure. The present system that is in place is a very much devoted to an "all water movement". There is a need to institute changes here and in

this regard the introduction of of new incoterms, ICC rules relating to combine transport document, new custom rulings etc. will facilitate and attract users to new opportunities offered by multimodal transport.

7.9. Finally it should be acknowledged that for a new multimodal service to be succesful a marketing strategy would need to be developed. This strategy would clearly define benefits to users and also educational segments covering new commercial practices of multimodal transport. Possibly for a controlled "start up" this service could be marketed to one or two major transport contractors or shipping lines to start this service. The cargo to be transported and marketed to start with could be rubber—one of main commodity exported by the country. This cargo for the multi transport operator can be conveniently handled and not easily damaged. With time and experience traffic and new skills would develop and multimodal transport with its inherent benefits can be an established pattern of transport in the country.

APPENDIX

The Uniform Rules for a Combined Transport Document were first issued as ICC Publication N° 273 in November 1973.

This revised version incorporates modifications designed to overcome practical difficulties of application concerning the combined transport operator's liability for delay. It was adopted by the ICC Executive Committee in June 1975.

First published October 1975 as ICC Publication 298.

This English language edition of Publication 298 gives the original text of the Rules. A French language edition is also available.

Uniform rules for a combined transport document

Carlos Moreno

combined transport document

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Introduction

The single mode tradition

The traditional carriage of goods by a single mode of transport developed an appropriate transport document for each mode. This document applies only to carriage by that mode. It is issued at the point of departure by that mode by the actual provider of the transport, and it establishes his liability for loss or damage to the goods whilst in his charge by reference to an international Convention, or to a national law, applying only to that mode of transport.

Each of these « single mode » transport documents has served to pass the information necessary for the movement of the goods, and also met commercial and financial needs by acting as a receipt for identified goods, as a contract of carriage, and also, when issued in negotiable form, as a document of title to the goods.

Combined transport operators

The transport developments of the past decade have led to a greatly increased through movement of goods, often in « unit load » form, from point of departure to a point of final destination by the successive use of more than one mode of transport.

Such « combined transport » (also referred to in the USA as « inter-modal transport » and in other parts of the world as « multi-modal transport ») means either the issue of a series of separate single mode transport documents — which is inefficient from the international trade viewpoint — or their replacement by a new, through, « start-to-finish » transport document.

Such new transport document, a « CT document » (combined transport document), would of necessity be issued by someone who might be the actual provider of the transport — or at least of part of it — or who might merely be an

arranger for the provision of all, or part of, the transport by others.

But whether as provider or as arranger of the transport, such person issuing the CT document (the CTO — Combined Transport Operator) would be acting as principal vis-à-vis the shipper and would be responsible, as a principal, for the transport being properly carried out, and liable, as a principal, for loss or damage wherever it occurred during the course of the whole combined transport.

Uniform Rules for CT Documents

In the absence of a new international Convention specially applicable to multi-modal transport in the way that existing conventions apply to the different single modes of transport, and as an essential measure to avoid the commercially retrograde step of the development of a multiplicity of differing documents for combined transport operations, the ICC has drafted a set of minimum uniform rules to govern an acceptable — and easily recognisable — CT document. The Rules may be given legal effect by their incorporation into a private contract, the combined transport contract evidenced by the CT document.

Application

The ICC Rules are applied by the issue of the CT document, and by the issue of this document the CTO accepts full responsibility for the performance of the combined transport, as well as liability, throughout the entire combined transport.

Because, however, the Rules are applied by private contract,

- a. The liability for loss or damage has to be governed :

General provisions

i. by the appropriate single mode rules when the loss or damage can be attributed to a particular stage of transport (cf. Rule 13), or

ii by the ICC Rules when the loss or damage is "concealed", i. e. cannot be attributed to a particular stage of transport (cf. Rules 11 and 12).

The liability for delay has to be governed in all cases by the single mode rules regarding delay, where such single mode rules exist, applying to the stage of transport where the delay occurred (cf. Rule 14).

Nevertheless, the Rules do not preclude the voluntary acceptance by the CTO of a greater responsibility or obligation than that outlined above.

Forward looking

The Rules are also forward looking, in that they take note of the increasing tendency to replace negotiable documents of title, which must be surrendered at destination before the goods may be delivered, by non-negotiable documents, whereby delivery is made to a consignee named in the document without the need to surrender any document, and provide for the issue of the CT document in either negotiable form, or in non-negotiable form.

They do not, however — and, indeed, they cannot — legislate for the commercial and financial standing of the CTO. This will be resolved by commercial willingness — or by commercial unwillingness — to regard a CT document issued by any particular CTO as a worthwhile document.

In this revised form the Rules represent a major contribution towards the simplification of international trade procedures as a means of facilitating international trade and its finance.

Rule 1

a. These Rules apply to every contract concluded for the performance and/or procurement of performance of combined transport of goods which is evidenced by a combined transport document as defined herein.

These Rules shall nevertheless apply even if the goods are carried by a single mode of transport contrary to the original intentions of the contracting parties that there should be a combined transport of the goods as defined hereafter.

b. The issuance of such combined transport document confers and imposes on all parties having or thereafter acquiring an interest in it the rights, obligations and defences set out in these Rules.

c. Except to the extent that it increases the responsibility or obligation of the combined transport operator, any stipulation or any part of any stipulation contained in a contract of combined transport or in a combined transport document evidencing such contract, which would directly or indirectly derogate from these Rules shall be null and void to the extent of the conflict between such stipulation, or part thereof, and these Rules. The nullity of such stipulation or part thereof shall not affect the validity of the other provisions of the contract of combined transport or combined transport document of which it forms a part.

Definitions

e 2

For the purpose of these Rules :

Combined transport means the carriage of goods by at least two different modes of transport, from a place at which the goods are taken in charge situated in one country to a place designated for delivery situated in a different country.

Combined transport operator (CTO) means a person (including any corporation, company or legal entity) issuing a combined transport document.

Where a national law requires a person to be authorised or licenced before being entitled to issue a combined transport document, then combined transport operator can only refer to a person so authorised or licenced.

Combined transport document (CT Document) means a document evidencing a contract for the performance and/or procurement of performance of combined transport of goods and bearing on its face either the heading « Negotiable combined transport document issued subject to Uniform Rules for a Combined Transport Document (ICC Publication N° 298) » or the heading « Non-negotiable combined transport document issued subject to Uniform Rules for a Combined Transport Document (ICC Publication N° 298) ».

Different modes of transport means the transport of goods by two or more modes of transport, such as transport by sea, inland waterway, air, rail or road.

Delivery means delivering the goods to or placing the goods at the disposal of the party entitled to receive them.

Franc means a unit consisting of 65.5 milligrammes of gold of millesimal fineness 900.

Negotiable document

Rule 3

Where a CT document is issued in negotiable form :

- a. it shall be made out to order or to bearer ;
- b. if made out to order it shall be transferable by endorsement ;
- c. if made out to bearer it shall be transferable without endorsement ;
- d. if issued in a set of more than one original it shall indicate the number of originals in the set ;
- e. if any copies are issued each copy shall be marked « non-negotiable copy » ;
- f. delivery of the goods may be demanded only from the CTO or his representative, and against surrender of the CT document duly endorsed where necessary ;
- g. the CTO shall be discharged of his obligation to deliver the goods if, where a CT document has been issued in a set of more than one original, he, or his representative, has in good faith delivered the goods against surrender of one of such originals.

Non-negotiable document

Rule 4

Where a CT document is issued in non-negotiable form :

- a. it shall indicate a named consignee ;
- b. the CTO shall be discharged of his obligation to deliver the goods if he makes delivery thereof to the consignee named in such non-negotiable document, or to the party advised to the CTO by such consignee as authorised by him to accept delivery.

Responsibilities and liabilities of the CTO

e 5

By the issuance of a CT document the CTO:

undertakes to perform and/or in his own name to procure performance of the combined transport — including all services which are necessary to such transport — from the time of taking the goods in charge to the time of delivery, and accepts responsibility for such transport and such services to the extent set out in these Rules;

accepts responsibility for the acts and omissions of his agents or servants, when such agents or servants are acting within the scope of their employment, as if such acts and omissions were his own;

accepts responsibility for the acts and omissions of any other person whose services he uses for the performance of the contract evidenced by the CT document;

undertakes to perform or to procure performance of all acts necessary to ensure delivery;

assumes liability to the extent set out in these Rules for loss of or damage to the goods occurring between the time of taking them into his charge and the time of delivery, and undertakes to pay compensation as set out in these Rules in respect of such loss or damage;

assumes liability to the extent set out in Rule 14 for delay in delivery of the goods and undertakes to pay compensation as set out in that Rule.

Rights and duties of the parties

Rule 6

In addition to the information specifically required by these Rules, the parties shall insert in a CT document such particulars as they may agree to be commercially desirable.

Rule 7

The consignor shall be deemed to have guaranteed to the CTO the accuracy, at the time the goods were taken in charge by the CTO, of the description, marks, number, quantity, weight and/or volume of the goods as furnished him, and the consignor shall indemnify the CTO against all loss, damage and expense arising or resulting from inaccuracies in or inadequacy of such particulars.

The right of the CTO to such indemnity shall in no way limit his responsibility and liability under the CT Document to any person other than the consignor.

Rule 8

The consignor shall comply with rules which are mandatory according to the national law or by reason of international Convention, relating to the carriage of goods of a dangerous nature, and shall in any case inform the CTO in writing of the exact nature of the danger before goods of a dangerous nature are taken in charge by the CTO and indicate to him, if need be, the precautions to be taken.

If the consignor fails to provide such information and the CTO is unaware of the dangerous nature of the goods and the necessary precautions to be taken and if, at any time, they are deemed to be a hazard to life or property, they may at any place be unloaded, destroyed or

rendered harmless, as circumstances may require, without compensation, and the consignor shall be liable for all loss, damage, delay or expenses arising out of their being taken in charge, or their carriage, or of any service incidental thereto.

The burden of proving the CTO knew the exact nature of the danger constituted by the carriage of the said goods shall rest upon the person entitled to the goods.

The CTO shall clearly indicate in the CT document, at least by quantity and/or weight and/or volume and/or marks, the goods he has taken in charge and for which he accepts responsibility.

Subject to paragraph 1 of this Rule, if the CTO has reasonable grounds for suspecting that the CT document contains particulars concerning the description, marks, number, quantity, weight and/or volume of the goods which do not represent accurately the goods actually taken in charge, or if he has no reasonable means of checking such particulars, the CTO shall be entitled to enter his reservations in the CT document, provided he indicates the particular information to which such reservations apply.

The CT document shall be prima facie evidence of the taking in charge by the CTO of the goods as therein described. Proof to the contrary shall not be admissible when the CT document is issued in negotiable form and has been transferred to a third party acting in good faith.

Except in respect of goods treated as lost in accordance with Rule 15 hereof, the CTO shall be deemed prima facie to have delivered the goods as described in the CT document unless notice of loss of, or damage to, the goods, indicating

the general nature of such loss or damage, shall have been given in writing to the CTO or to his representative at the place of delivery before or at the time of removal of the goods into the custody of the person entitled to delivery thereof under the CT document, or, if the loss or damage is not apparent, within seven consecutive days thereafter.

Liability for Loss or Damage

A. Rules applicable when the stage of transport where the loss or damage occurred is not known

Rule 11

When in accordance with Rule 5 (e) hereof the CTO is liable to pay compensation in respect of loss of, or damage to, the goods and the stage of transport where the loss or damage occurred is not known :

- a. such compensation shall be calculated by reference to the value of such goods at the place and time they are delivered to the consignee or at the place and time when, in accordance with the contract of combined transport, they should have been so delivered ;
- b. the value of the goods shall be determined according to the current commodity exchange price or, if there is no such price, according to the current market price, or, if there is no commodity exchange price or current market price, by reference to the normal value of goods of the same kind and quality.
- c. compensation shall not exceed 30 francs per kilo of gross weight of the goods lost or damaged, unless, with the consent of the CTO, the consignor has declared a higher value for the goods and such

higher value has been stated in the CT document, in which case such higher value shall be the limit.

However, the CTO shall not, in any case, be liable for an amount greater than the actual loss to the person entitled to make the claim.

When the stage of transport where the loss or damage occurred is not known the CTO shall not be liable to pay compensation in accordance with Rule 5 (e) hereof if the loss or damage was caused by :

an act or omission of the consignor or consignee, or person other than the CTO acting on behalf of the consignor or consignee, or from whom the CTO took the goods in charge ;

insufficiency or defective condition of the packing or marks ;

handling, loading, stowage or unloading of the goods by the consignor or the consignee or any person acting on behalf of the consignor or the consignee ;

inherent vice of the goods ;

strike, lockout, stoppage or restraint of labour, the consequences of which the CTO could not avoid by the exercise of reasonable diligence ;

any cause or event which the CTO could not avoid and the consequences of which he could not prevent by the exercise of reasonable diligence ;

a nuclear incident if the operator of a nuclear installation or a person acting for him is liable for this damage under an applicable international Convention or national law governing liability in respect of nuclear energy.

The burden of proving that the loss or damage was due to one or more of the

above causes or events shall rest upon the CTO.

When the CTO establishes that, in the circumstances of the case, the loss or damage could be attributed to one or more of the causes or events specified in (b) to (d) above, it shall be presumed that it was so caused. The claimant shall, however, be entitled to prove that the loss or damage was not, in fact, caused wholly or partly by one or more of these causes or events.

B. Rules applicable when the stage of transport where the loss or damage occurred is known

Rule 13

When in accordance with Rule 5 (e) hereof the CTO is liable to pay compensation in respect of loss or damage to the goods and the stage of transport where the loss or damage occurred is known, the liability of the CTO in respect of such loss or damage shall be determined :

- a. by the provisions contained in any international Convention or national law, which provisions :
 - i cannot be departed from by private contract, to the detriment of the claimant, and
 - ii would have applied if the claimant had made a separate and direct contract with the CTO in respect of the particular stage of transport where the loss or damage occurred and received as evidence thereof any particular document which must be issued in order to make such international Convention or national law applicable ; or
- b. by the provisions contained in any international Convention relating to the carriage of goods by the mode of transport used to carry the goods at the time when

the loss or damage occurred, provided that :

I no other international Convention or national law would apply by virtue of the provisions contained in sub-paragraph (a) of this Rule, and that

II it is expressly stated in the CT Document that all the provisions contained in such Convention shall govern the carriage of goods by such mode of transport ; where such mode of transport is by sea, such provisions shall apply to all goods whether carried on deck or under deck ; or

by the provisions contained in any contract of carriage by inland waterways entered into between the CTO and any sub-contractor, provided that :

I no international Convention or national law is applicable under sub-paragraph (a) of this Rule, or is applicable, or could have been made applicable, by express provision in accordance with sub-paragraph (b) of this Rule and that

II it is expressly stated in the CT Document that such contract provisions shall apply ; or

by the provisions of Rules 11 and 12 in cases where the provisions of sub-paragraphs (a), (b) and (c) above do not apply.

Without prejudice to the provisions of Rule 5 (b) and (c), when, under the provisions of the preceding paragraph, the liability of the CTO shall be determined by the provisions of any international Convention or national law, this liability shall be determined as though the CTO were the carrier referred to in any such Convention or national law. However, the CTO shall not be exonerated from liability where the loss or damage is caused or contributed to by the acts or omissions of the CTO in his capacity as such, or his servants or agents when acting in such capacity and not in the performance of the carriage.

Liability for Delay

Rule 14

The CTO is liable to pay compensation for delay only when the stage of transport where a delay occurred is known, and to the extent that there is liability under any international Convention or national law, the provisions of which :

I cannot be departed from by private contract to the detriment of the claimant ;

II would have applied if the claimant had made a separate and direct contract with the CTO as operator of that stage of transport and received as evidence thereof any particular document which must be issued in order to make such international Convention or national law applicable.

However, the amount of such compensation shall not exceed the amount of the freight for that stage of transport, provided that this limitation is not contrary to any applicable international Convention or national law.

Miscellaneous Provisions

Rule 15

Failure to effect delivery within 90 days after the expiry of a time limit agreed and expressed in a CT Document or, where no time limit is agreed and so expressed, failure to effect delivery within 90 days after the time it would be reasonable to allow for diligent completion of the combined transport operation shall, in the absence of evidence to the contrary, give to the party entitled to receive delivery the right to treat the goods as lost.

16

The defences and limits of liability provided for in these Rules shall apply in any action against the CTO for loss of, damage, or delay to the goods whether the action be founded in contract or in tort.

17

The CTO shall not be entitled to the benefit of the limitation of liability provided for in Rule 11 hereof if it is proved that the loss or damage resulted from an act or omission of the CTO done with intent to cause damage or recklessly and with knowledge that damage would probably result.

8

Nothing in these Rules shall prevent the CTO from including in the CT document provisions for protection of his agents or servants or any other person whose services he uses for the performance of the contract evidenced by the CT document, provided such protection does not extend beyond that granted to the CTO himself.

Time-bar

The CTO shall be discharged of all liability under these Rules unless suit is brought within nine months after,

- i the delivery of the goods, or,
- ii the date when the goods should have been delivered, or
- iii the date, when in accordance with Rule 15, failure to deliver the goods would, in the absence of evidence to the contrary, give to the party entitled to receive delivery the right to treat the goods as lost.

Publications

Incoterms

Ex Works, Ex Ship, and CIF... what exactly do terms such as these mean as regards specific responsibilities for buyer and seller? To be sure that trading partners have the same definitions in mind, quote Incoterms — the ICC's universally recognized series of standard international trade term definitions. Latest 1977 editions include definitions of twelve most widely used terms (Bilingual English-French, English-German and English-Spanish editions). N° 274

Guide to Documentary Credit Operations

This new guide explains the role of documentary credits and, in a practical, step-by-step manner, how they work. International businessmen and bankers will find it invaluable in their daily professional life. It includes the Uniform Customs and Practice given in Publication N° 290 (English and French editions). N° 305

The Problem of Clean Bills of Lading

A "clean" bill of lading proving that the carrier received the consignment from the seller in good order is a necessity in international trade transactions. Yet bills are often qualified by "superimposed clauses", a major potential cause of disputes between seller, carrier and buyer. This publication explains the situation, gives recommendations on avoiding disputes, and concludes with a list of superimposed clauses in common use (English and French editions). N° 283

ICC arbitration : the international solution to international business disputes

An increasing number of international business disputes are resolved every year by the Arbitration Court of the ICC - smoothly and confidentially. The ICC has now published a guide which explains in detail how it works. It is a valuable working tool for international lawyers and essential reading for all businessmen engaged in international trade and commerce (English and French editions. German edition in preparation). N° 301

Rules for Maritime Arbitration

Until now the number and scope of maritime cases before the ICC Court of Arbitration has been limited. With these new Rules, the Court will have the flexibility to deal with arbitration disputes involving chartering, contracts of carriage, marine insurance, shipbuilding and ship repairing, etc. The Rules are issued, and will be administered, jointly with the International Maritime Committee (English and French editions). N° 324

The Development of International Container Transport : Its Application in Developing Countries

An up-to-date brief on the latest techniques (English and French editions). N° 314

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Telephone : 261.85.97 - Telex : ICCHQ 650770

AA ~~APPENDIX 1~~
~~SHIPBOARD~~

APPENDIX

APPENDIX



FBL

No.

Country
Code

NEGOTIABLE FIATA
COMBINED TRANSPORT
BILL OF LADING



issued subject to ICC Uniform Rules for a
Combined Transport Document (ICC publication '298).

Consigned to order of

Notify address

Place of Receipt

Place of Delivery

Marks and numbers

Number and kind of packages

Description of goods

Gross weight

Measurement

specimen

according to the declaration of the merchant

The goods and instructions are accepted and dealt with subject to the Standard Conditions printed overleaf.

Taken in charge in apparent good order and condition, unless otherwise noted herein, at the place of receipt for transport and delivery as mentioned above.

One of these Combined Transport Bills of Lading must be surrendered duly endorsed in exchange for the goods. In Witness whereof the original Combined Transport Bills of Lading all of this tenor and date have been signed in the number stated above, one of which being accomplished the other(s) to be void.

Freight amount	Freight payable at	Place and date of issue
Cargo Insurance through the undersigned <input type="checkbox"/> not covered <input type="checkbox"/> Covered according to attached Policy	Number of Original FBL's	Stamp and authorized signature
For delivery of goods please apply to:		

Standard Conditions (1978) governing FIATA COMBINED TRANSPORT BILLS OF LADING

Definitions -Merchant- means and includes the Shipper, the Consignor, the Consignee, the Holder of this Bill of Lading, the Receiver and the Owner of the Goods. -The Freight Forwarder- means the issuer of this Bill of Lading as named on the face of it.

The headings set forth below are for easy reference only.

CONDITIONS

1. Applicability

Notwithstanding the heading -Combined Transport Bill of Lading-, the provisions set out and referred to in this document shall also apply if the transport as described on the face of the Bill of Lading, contrary to the original intention of the parties, is performed by one mode of transport only.

2. Issuance of the -Combined Transport Bill of Lading-

2.1 By the issuance of this -Combined Transport Bill of Lading-, the Freight Forwarder:

a) undertakes to perform and/or in his own name to procure the performance of the entire transport, from the place at which the goods are taken in charge to the place designated for delivery in this Bill of Lading.

b) assumes liability as set out in these Conditions.

2.2 For the purposes and subject to the provisions of this Bill of Lading, the Freight Forwarder shall be responsible for the acts and omissions of any person of whose services he makes use for the performance of the contract evidenced by this Bill of Lading.

3. Negotiability and title to the goods

3.1 By accepting this Bill of Lading the Merchant and his transferees agree with the Freight Forwarder that, unless it is marked -non-negotiable-, it shall constitute title to the goods and the holder, by endorsement of this Bill of Lading, shall be entitled to receive or to transfer the goods herein mentioned.

3.2 This Bill of Lading shall be prima facie evidence of the taking in charge by the Freight Forwarder of the goods as herein described. However, proof to the contrary shall not be admissible when this Bill of Lading has been negotiated or transferred for valuable consideration to a third party acting in good faith.

4. Dangerous Goods and Indemnity

4.1 The Merchant shall comply with rules which are mandatory according to the national law or by reason of International Convention, relating to the carriage of goods of a dangerous nature, and shall in any case inform the Freight Forwarder in writing of the exact nature of the danger, before goods of a dangerous nature are taken in charge by the Freight Forwarder and indicate to him, if need be, the precautions to be taken.

4.2 If the Merchant fails to provide such information and the Freight Forwarder is unaware of the dangerous nature of the goods and the necessary precautions to be taken and if, at any time, they are deemed to be a hazard to life or property, they may at any place be unloaded, destroyed or rendered harmless, as circumstances may require, without compensation, and the Merchant shall be liable for all loss, damage, delay or expenses arising out of their being taken in charge, or their carriage, or of any service incidental thereto.

The burden of proving the Freight Forwarder knew the exact nature of the danger constituted by the carriage of the said goods shall rest upon the person entitled to the goods.

4.3 If any goods shipped with the knowledge of the Freight Forwarder as to their dangerous nature shall become a danger to the vehicle or cargo, they may in like manner be unloaded or landed at any place or destroyed or rendered innocuous by the Freight Forwarder, without liability on the part of the Freight Forwarder, except to General Average, if any.

5. Description of Goods and Merchant's Packing

5.1 The Consignor shall be deemed to have guaranteed to the Freight Forwarder the accuracy, at the time the goods were taken in charge by the Freight Forwarder, of the description of the goods, marks, number, quantity, weight and/or volume as furnished by him, and the Consignor shall indemnify the Freight Forwarder against all loss, damage and expenses arising or resulting from inaccuracies in or inadequacy of such particulars. The right of the Freight Forwarder to such indemnity shall in no way limit his responsibility and liability under this Bill of Lading to any person other than the Consignor.

5.2 Without prejudice to Clause 6 (A) (2) (c), the Merchant shall be liable for any loss, damage or injury caused by faulty or insufficient packing of goods or by faulty loading or packing within containers and trailers and on flats when such loading or packing has been performed by the Merchant or on behalf of the Merchant by a person other than the Freight Forwarder, or by the defect or unsuitability of the containers, trailers or flats, when supplied by the Merchant, and shall indemnify the Freight Forwarder against any additional expenses so caused.

6. Extent of Liability

A. 1) The Freight Forwarder shall be liable for loss of or damage to the goods occurring between the time when he takes the goods into his charge and the time of delivery.

2) The Freight Forwarder shall, however, be relieved of liability for any loss or damage if such loss or damage was caused by:

a) an act or omission of the Merchant, or person other than the Freight Forwarder acting on behalf of the Merchant or from whom the Freight Forwarder took the goods in charge;

b) insufficiency or defective condition of the packaging or marks and/or numbers;

c) handling, loading, stowage or unloading of the goods by the Merchant or any person acting on behalf of the Merchant;

d) inherent vice of the goods;

e) strikes, lockout, stoppage or restraint of labour, the consequences of which the Freight Forwarder could not avoid by the exercise of reasonable diligence;

f) any cause or event which the Freight Forwarder could not avoid and the consequences whereof he could not prevent by the exercise of reasonable diligence;

g) a nuclear incident if the operator of a nuclear installation or a person acting for him is liable for this damage under an applicable International Convention or national law governing liability in respect of nuclear energy.

3) The burden of proving that the loss or damage was due to one or more of the above causes or events shall rest upon the Freight Forwarder.

When the Freight Forwarder establishes that, in the circumstances of the case, the loss or damage could be attributed to one or more of the causes or events specified in b) to d) above, it shall be presumed that it was so caused. The claimant shall, however, be entitled to prove that the loss or damage was not, in fact, caused wholly or partly by one or more of these causes or events.

B. When in accordance with clause 6. A.1 the Freight Forwarder is liable to pay compensation in respect of loss or damage to the goods and the stage of transport where the loss or damage occurred is known, the liability of the Freight Forwarder in respect of such loss or damage shall be determined by the provisions contained in any International Convention or national law, which provisions

(i) cannot be departed from by private contract, to the detriment of the claimant, and

(ii) would have applied if the Claimant had made a separate and direct contract with the Freight Forwarder in respect of the particular stage of transport where the loss or damage occurred and received as evidence thereof any particular document which must be issued in order to make such International convention or national law applicable.

7. Paramount Clause

The Hague Rules contained in the International Convention for the unification of certain rules relating to Bills of Lading, dated Brussels 25th August 1924, or in those countries where they are already in force the Hague-Visby Rules contained in the Protocol of Brussels, dated February 23rd 1968, as enacted in the Country of Shipment, shall apply to all carriage of goods by sea and, where no mandatory International or national law applies, to the carriage of goods by inland waterways also, and such provisions shall apply to all goods whether carried on deck or under deck.

8. Limitation Amount

8.1 When the Freight Forwarder is liable for compensation in respect of loss of or damage to the goods, such compensation shall be calculated by reference to the value of such goods at the place and time they are delivered to the Consignee in accordance with the contract or should have been so delivered.

8.2 The value of the goods shall be fixed according to the current commodity exchange price, or, if there be no such price, according to the current market price, or, if there be no commodity exchange price or current market price, by reference to the normal value of goods of the same kind and quality.

8.3 Compensation shall not, however, exceed 30 Francs (-Franc- meaning a unit consisting of 65.5 mgs of gold of millesimal fineness 900) per kilo of gross weight of the goods lost or damaged, unless, with the consent of the Freight Forwarder, the Merchant has declared a higher value for the goods and such higher value has been stated in the CT Bill of Lading, in which case such higher value shall be the limit. However, the Freight Forwarder shall not, in any case, be liable for an amount greater than the actual loss to the person entitled to make the claim.

9. Delay, Consequential Loss, etc.

Arrival times are not guaranteed by the Freight Forwarder. If the Freight Forwarder is held liable in respect of delay, consequential loss or damage other than loss of or damage to the goods, the liability of the Freight Forwarder shall be limited to double the freight for the transport covered by this Bill of Lading, or the value of the goods as determined in Clause 8, whichever is the less.

10. Defences

10.1 The defences and limits of liability provided for in these Conditions shall apply in any action against the Freight Forwarder for loss of or damage or delay to the goods whether the action be founded in contract or in tort.

10.2 The Freight Forwarder shall not be entitled to the benefit of the limitation of liability provided for in paragraph 3 of Clause 8 if it is proved that the loss or damage resulted from an act or omission of the Freight Forwarder done with intent to cause damage or recklessly and with knowledge that damage would probably result.

11. Liability of Servants and Sub-contractors

11.1 If an action for loss of or damage to the goods is brought against a person referred to in paragraph 2 of Clause 2, such person shall be entitled to avail himself of the defences and limits of liability which the Freight Forwarder is entitled to invoke under these Conditions.

11.2 However, if it is proved that the loss or damage resulted from an act or omission of this person, done with intent to cause damage or recklessly and with knowledge that damage would probably result, such person shall not be entitled to benefit of limitation of liability provided for in paragraph 3 of Clause 8.

11.3 Subject to the provisions of paragraph 2 of Clause 10 and paragraph 2 of this Clause, the aggregate of the amounts recoverable from the Freight Forwarder and the persons referred to in paragraph 2 of Clause 2 shall in no case exceed the limits provided for in these Conditions.

12. Method and Route of Transportation

The Freight Forwarder reserves to himself a reasonable liberty as to the means, route and procedure to be followed in the handling, storage and transportation of goods.

13. Delivery

If delivery of the goods or any part thereof is not taken by the Merchant, at the time and place when and where the Freight Forwarder is entitled to call upon the Merchant to take delivery thereof, the Freight Forwarder shall be entitled to store the goods or the part thereof at the sole risk of the Merchant, where upon the liability of the Freight Forwarder in respect of the goods or that part thereof stored as aforesaid (as the case may be) shall wholly cease and the cost of such storage (if paid by or payable by the Freight Forwarder or any agent or sub-contractor of the Freight Forwarder) shall forthwith upon demand be paid by the Merchant to the Freight Forwarder.

14. Freight and Charges

14.1 Freight shall be paid in cash without discount and, whether prepayable or payable at destination, shall be considered as earned on receipt of the goods and not to be returned or relinquished in any event.

14.2 Freight and all other amounts mentioned in this Bill of Lading are to be paid in the currency named in the Bill of Lading or, at the Freight Forwarder's option in the currency of the country of dispatch or destination at the highest rate of exchange for bankers sight bills current for prepayable freight on the day of dispatch and for freight payable at destination on the day when the Merchant is notified of arrival of the goods there or on the date of withdrawal of the delivery order, whichever rate is the higher, or at the option of the Freight Forwarder on the date of the Bill of Lading.

14.3 All dues, taxes and charges or other expenses in connection with the goods shall be paid by the Merchant.

14.4 The Merchant shall reimburse the Freight Forwarder in proportion to the amount of freight for any costs for deviation or delay or any other increase of costs of whatever nature caused by war, warlike operations, epidemics, strikes, government directions or force majeure.

14.5 The Merchant warrants the correctness of the declaration of contents, insurance, weight measurements or value of the goods but the Freight Forwarder reserves the right to have the contents inspected and the weight, measurements or value verified. If on such inspection it is found the declaration is not correct it is agreed that a sum equal either to five times the difference between the correct figure and the freight charged, or to double the correct freight less the freight charged, whichever sum is the smaller, shall be payable as liquidated damage to the Freight Forwarder for his inspection costs and losses of freight on other goods notwithstanding any other sum having been stated on the Bill of Lading as freight payable.

15. Lien

The Freight Forwarder shall have a lien on the goods for any amount due under this Bill of Lading including storage fees and for the cost of recovering same, and may enforce such lien in any reasonable manner which he may think fit.

16. General Average

The Merchant shall indemnify the Freight Forwarder in respect of any claims of a General Average nature which may be made on him and shall provide such security as may be required by the Freight Forwarder in this connection.

17. Notice

Unless notice of loss of or damage to the goods and the general nature of it be given in writing to the Freight Forwarder or the persons referred to in paragraph 2 of Clause 2, at the place of delivery before or at the time of the removal of the goods into the custody of the person entitled to delivery thereof under this Bill of Lading, or if the loss or damage be no apparent within seven consecutive days thereafter, such removal shall be prima facie evidence of the delivery by the Freight Forwarder of the goods as described in this Bill of Lading.

18. Non delivery

Failure to effect delivery within 90 days after the expiry of a time limit agreed and expressed in a CT Bill of Lading or, where no time limit is agreed and so expressed, failure to effect delivery within 90 days after the time it would be reasonable to allow for diligent completion of the combined transport operation shall, in the absence of evidence to the contrary, give to the party entitled to receive delivery, the right to treat the goods as lost.

19. Time Bar

The Freight Forwarder shall be discharged of all liability under the rules of these Conditions unless suit is brought within nine months after

(i) the delivery of the goods, or

(ii) the date when the goods should have been delivered, or

(iii) the date when in accordance with Clause 18, failure to deliver the goods would, in the absence of evidence to the contrary, give to the party entitled to receive delivery, the right to treat the goods as lost.

20. Jurisdiction

Actions against the Freight Forwarder may only be instituted in the country where the Freight Forwarder has his principal place of business and shall be decided according to the law of such country.